INSPECTION AND ENFORCEMENT

BLM received many comments addressing the proposed rules related to inspection and enforcement, both for and against the proposal. Some of the comments addressed inspection and enforcement together, and are discussed together for convenience.

15.01 **Comment:** Many commenters urged that inspection and enforcement be improved, asserting that inspection and enforcement of mining regulations are critical elements of the regulatory process. Without inspection and enforcement, they asserted, improved rules will be meaningless. These commenters asserted that inspection and enforcement also need to be strengthened to assure that environmental damage is as limited as possible and in particular to protect people, livestock, water, wildlife, and all other resources from the modern realities of mining.

One commenter stated that, although many miners now obey the law and their own consciences when it comes to operating and cleaning up responsibly, unfortunately many others fail miserably. This statement was based on observations "for many years, both near home and also throughout the region." The commenter urged that land managers need enough teeth in the regulations to ensure the compliance of all. Other commenters asserted that the proposed inspection and enforcement rules do not go far enough and supported the stronger inspection and enforcement measures proposed for Alternative 4 of the draft EIS .

Response: BLM generally agrees with the commenters, who urged strengthening of the BLM inspection and enforcement rules.

15.02 **Comment:** Commenters opposed BLM's proposed inspection and enforcement rules, asserting that this section is overly broad and will be administratively infeasible. Commenters stated that the industry's record with Notice-level compliance, though not spotless, is generally very good. Instead of revising the regulations, they urged BLM to allocate more resources and get more inspection people in the field.

Response: BLM disagrees with the commenter and believes that the rules are not too broad and will be workable. BLM will use available resources to conduct inspections.

Budget

15.03 **Comment:** The adequacy of BLM resources was a recurring theme. Commenters asserted that BLM must evaluate the people and funding it will take to implement the proposed inspection and enforcement provisions because BLM's current resources will be inadequate, and no funding increases have been requested. If current regulations are not adequate because of enforcement constraints, budgetary restraints, etc., commenters stated that increasing the scope will only increase the inability for compliance. For

example, a commenter asserted that it is questionable that BLM has the resources to conduct inspections "at least four times a year... if you use cyanide or where there is significant potential for acid drainage." Rather than cut back on the proposal, some commenters suggested a cost-recovery program under which miners pay fees to cover inspection and enforcement. Others stated that it is sad if fees and reclamation requirements put mining companies out of business, but the reality is that our Nation's history has brought many changes since 1872 and has altered how we look at and value safety and environmental integrity along with the importance of mineral wealth. If operators cannot afford to mine responsibly, then they should not be mining at all. Other commenters stated that the agency needs to build in budget line items for inspection and enforcement.

Response: BLM is clearly aware of budgetary issues for implementing these rules. These final rules reflect policy choices that BLM believes appropriate. BLM will determine whether budget and resources are sufficient for implementation and, if they are not, seek more resources if consistent with fiscal constraints and Administration priorities.

Inspection Frequency

15.04 **Comment:** A number of commenters addressed the issue of inspection frequency. On one side of the issue, commenters urged that inspection and enforcement of the regulations need to be more frequent and rigorous. Inspection and enforcement should be strengthened to include unannounced inspections of mining operations and more frequent inspections of high-risk operations. These commenters asserted that mining companies have shown through the years that they will not conduct environmentally responsible operations unless forced to by law. Therefore, it is extremely important that enforcement include frequent unannounced inspections. A commenter requested that the final rule address whether inspections would be scheduled or unannounced.

Some commenters suggested mandated inspection schedules for all operations, suggesting quarterly for example. For others, quarterly inspection is not sufficient, urging that every mine needs to be inspected at least monthly and a sophisticated BLM lab needs to be big enough to process samples of air, water, tailings, and dumps on a monthly basis, including chemical analysis of ground water, tailings, and air. Others suggested that the number and frequency of BLM inspections should be directly linked to documented risk evaluated in the NEPA compliance documents and incorporated in approved Plans of Operations.

Response: BLM agrees that inspections are an important part of any regulatory program. The frequency of inspections is a tradeoff between having a strong BLM presence at mines to assure environmental compliance and the resources needed to conduct such inspections. BLM has decided to specify the inspection frequency for the more hazardous operations, at least four times a year, and not to mandate an inspection frequency for other operations. When necessary, the inspections will be unannounced.

15.05 **Comment:** The U.S. Environmental Protection Agency (EPA) suggested that to assure effective environmental compliance at mine sites, inspections must begin with the start of operations and be ongoing. EPA suggested that the regulations be amended to require BLM to coordinate with state and federal environmental agencies to conduct a complete multimedia inspection of mines within 5 years after beginning full-scale operations. The regulations should send a strong message that a coordinated federal and state effort will be conducted at the beginning of the mine life to check environmental compliance. EPA suggested that these types of coordinated compliance inspections be held every 5 years throughout the life of the mine.

Response: BLM agrees that it should coordinate both its inspection and enforcement with state and other federal agencies. Such coordination can become formalized through memorandums of understanding or agreements, as suggested by the National Resource Council (NRC) report, to prevent duplications of effort and promote efficiency. (NTC 1999, page 104).

15.06 **Comment:** Other commenters asserted that proposed 3809.600, which would establish new provisions for the nature and frequency of BLM's inspections of mining operations, is generally unneeded and unsuitable and reflects BLM's failure to consider the substantial implications of its proposal. Commenters disagreed with BLM's statement that a specific number of inspections should be established to prevent adverse environmental impacts. Certain large operators did not object to more frequent BLM inspections or visits to the mine sites. These operators stated that contact between BLM and operators keeps the operators informed of BLM's concerns and educates BLM about mine operations, concluding that this interaction is desirable and can prevent misunderstandings or compliance problems.

Nevertheless, the operator had two concerns with the proposed rule. First, it is not clear that a mandatory inspection schedule is the most efficient use of BLM's limited resources. Second, BLM has considered its own inspection program in isolation from other state and federal regulatory authorities.

The operator asserted that a mandatory inspection frequency is inappropriate if it has no relationship to the risk or compliance problems of the site to be inspected. For example, the operator pointed out that an Office of Surface Mining rule eliminates a mandatory inspection frequency for certain categories of coal mines "to free resources that can focus on existing or potential problems at high risk sites." 59 Fed. Reg. 60876 (Nov. 18, 1994) (OSM rule reducing frequency of inspections for abandoned, but not completely reclaimed coal mines). The operator concluded that the goal of quarterly inspections is useful but such inspections should not be written into the regulations as mandatory. The operator suggested that as an alternative, BLM should consider regulatory language that directs BLM field officers to target their inspection and compliance resources at high- risk sites or at sites during critical periods (such as placement of liners or during construction). The

operator also proposed that the regulations include a provision to require a followup inspection when a major notice of noncompliance has been issued. These provisions would give BLM more flexibility and would be more effective in preventing unnecessary or undue degradation than a formulaic approach to compliance inspections.

Response: BLM fully intends to cooperate with other agencies with regulatory jurisdiction over mining operations. Nevertheless BLM believes it important to codify its existing policy of four inspections a year for operations that use cyanide or other leachate or that have a significant acid-generating potential. This policy has worked so far, and BLM wants to assure itself and the public that it will continue, thus satisfying BLM land management responsibilities. The reference to the OSM rule is not on point because that rule dealt with abandoned coal mines where continued quarterly inspections serve no purpose. Similarly, BLM would use a rule of reason and not continue quarterly inspections of abandoned mines, where more frequent inspections serve little purpose.

15.07 **Comment:** One operator opposed incorporating into the rules the current BLM policy of inspecting cyanide operations four times a year. The commenter stated that the regulations do not need to be revised. What is needed is full implementation of existing programs. Other commenters took issue with the requirement for four annual inspections of certain mines. The number is arbitrary and capricious and does not reflect any documented problem with the lack of BLM inspections. Further, the mandatory number does not realistically recognize likely scenarios in arctic conditions. For example, the commenter asserted, the Illinois heap leach mine in Alaska (not on public lands) mines only in the summer. Similarly, BLM need not inspect at least four times per year for winter exploratory drilling.

Commenters stated that BLM's requirement for a minimum frequency of inspections appears to be based, at least in part, on an incomplete assessment of other state and federal regulatory programs and that BLM failed to properly account for the number of inspections required by states (e.g. pursuant to the air, water, waste, and cyanide processing programs) as well as inspections by EPA for ongoing oversight of the federal environmental permitting and enforcement programs. The commenter suggested that if it places its inspections in the context of all federal and state inspections, BLM can more reasonably allocate its resources.

On a technical level, one commenter asked that BLM define the term "significant potential for acid drainage," asserting that there is a wide range of confusing and ambiguous applications of the concept of a mining operation that may or may not produce significant acid rock drainage. These applications can range from standard core drilling of a high-sulfide mineral deposit, to open trenching, to underground mining, to open pit mining, to road or airport construction that will expose sulfide-bearing country rock. Although there may be high acid rock drainage (ARD) potential, the scale of the mining operation may not be threatening. Conversely, a large-scale operation in an area with low ARD potential

might be of significant concern. The commenter suggested that a table such as BLM has used in other parts of the proposed 3809 regulations would help sharpen BLM intentions and provide for uniform application among resource areas, districts, and states.

Response: BLM appreciates the comment and will consider developing policy guidance to assure consistency among its offices.

Inspection Procedures

15.08 **Comment:** Commenters addressed the nature of inspections and the measurement of compliance. One commenter asserted that the practical realities of judging compliance with unachievable performance standards to eliminate impacts will create substantial problems for both BLM and the mining industry. For instance, how will BLM inspectors determine when erosion control and acid generation management measures comply with the "minimize" performance standard? Will each mine or mineral exploration site be judged on a case-by-case basis, subject to the individual inspector's discretionary interpretation of what constitutes minimize?

Response: Trained, professional BLM inspectors will perform their jobs using their best judgment in determining whether operators comply with their approved Plans of Operations. Compliance with the approved Plan is the key. Although the rules contain standards such as "minimize" rather than numeric standards, the Plans will specify the activities that are allowable, and where suitable, the acceptable parameters at a particular location.

15.09 **Comment:** Some commenters objected to the scope and timing of inspections, asserting that the BLM inspector cannot inspect "at any time" as provided by proposed section 3809.600(a). Some mining companies did not object to BLM's proposal for BLM employees to inspect mining operations on public lands as long as such inspections are made at reasonable times–during normal business hours. These commenters asserted that without a specific grant of authority from Congress, inspections must be conducted at reasonable times. Commenters asserted that inspectors must notify the operator of their presence and permit representatives of the operator to accompany them during any such inspections. In addition, allowing inspectors unrestricted access to "all structures, equipment, workings and uses located on public lands" is too sweeping it its effect and creates significant safety concerns. Inspector access should be limited to property (both real and personal) having a reasonable relationship to BLM's role of ensuring compliance with the proposed revisions. Such limited access is especially appropriate in light of federal and state health and safety mandates.

Response: To perform its inspections properly, BLM needs to be able to inspect whenever, wherever, or whatever is required to assure compliance with its regulations on the public lands. Many mining operations are conducted around the clock, and problems

can arise anytime and anywhere on a mine site. When appropriate, BLM inspectors may allow operator representatives to accompany them, but not to the extent of interfering with their inspections. BLM expects that its inspectors will ordinarily inform operators of their presence. BLM inspectors will conform to health and safety mandates.

15.10 **Comment:** Some commenters wanted BLM to allow citizens to request inspections of mines.

Response: We do not view it necessary for our rules to allow citizens to request inspections. BLM's offices already allow anyone to inform BLM of the existence of problems and to request inspections. BLM is not aware of a lack of responsiveness of its personnel that needs to be addressed in its rules.

15.11 **Comment:** Several commenters asserted that, if possible, those who enforce the regulations should not be the same as those who approve mine permits and that the enforcement and regulatory processes should be otherwise kept apart. Such commenters were concerned about the independence of inspectors. They suggested that BLM should consider dividing the agency into those who approve the mines and those who enforce environmental protection.

Response: Although BLM understands the commenters' concern, the final rules do not address who can or cannot perform inspections. BLM agrees that inspectors need to be impartial in enforcing the rules, but persons who are involved in making decisions on Plans of Operations should not necessarily be precluded from determining whether operators have complied with the Plans. In fact, the persons involved with permitting may be more familiar with what is allowable under a Plan of Operations than a person who has had no earlier involvement.

15.12 **Comment:** A commenter asked that BLM revise proposed section 600(a) to state the extent and authority of BLM to inspect the inside of private residential structures owned by workers at the mine site. The commenter asked that BLM define residential structures for the purposes of this subpart because the referenced 3715.7 focuses on a wide variety of uses that are exclusive of mining. "For example," the commenter asked, "does this include unlimited BLM inspection of living accommodations for the work force at medium-sized remote mines in Alaska with workers living in trailers/campers?" The commenter requested that BLM define how this provision applies to large and small size mines where there are no alternative living provisions.

Response: As referenced in the rule for the convenience of readers, inspection of residences on the public lands is covered by 43 CFR 3715.7. Section 3715.7(b) provides that BLM will not inspect the inside of structures used solely as residences unless an occupant or court of competent jurisdiction gives permission. For more information on BLM's occupancy rules, see the July 16, 1996 *Federal Register* preamble at 61 FR 37125.

15.13 **Comment:** Commenters opposed self-monitoring by operators. The commenters asserted that mine operators have a huge vested interest in ensuring that the results of such testing do not adversely affect operations at the mine. They questioned the reliability of asking someone in such a position to produce accurate and honest results. Also, commenters asserted that some mine operators may be honest but unskilled in making accurate scientific measurements.

Response: Although BLM will perform inspections, the rules also require monitoring plans under which operators perform monitoring. Despite the concerns expressed by commenters, operator monitoring can be an effective way to keep track of activities at an operation. Records have to be maintained, and falsification or misrepresentation is a violation.

Proposed Section 3809.600(b) Citizen Participation in Inspection

One of the most controversial issues in the proposed rule, generating many comments, was BLM's proposal to allow the public to accompany BLM inspectors on mine inspections. Under the proposal, BLM would have been able to allow persons to accompany a BLM inspector onto mining sites, as long as the presence of the visitor would not materially interfere with mining operations or BLM's activities, or create safety problems. Under the proposal, when BLM authorized a member of the public to accompany the inspector, the operator would have been required to provide access to operations.

Opposition to Public Participation in Inspections

15.14 **Comment:** Many commenters opposed public involvement in the inspection process. Capturing a common fear of miners was one commenter who stated, "the only members of the public likely to accompany a BLM inspector onto a mine sites are apt to be political opponents of the mine or individuals with anti-mining agendas." Public safety and liability, some observe, present another barrier to citizen participation. "It is unreasonable for the federal government," pointed out one commenter "to establish regulations that create unnecessary risk to the industry and the public." Commenters also raised objections to the legality of authorizing public access to mining operations, proprietary concerns about information and site security, and administrative objections to public access.

Commenters asserted that general citizens should not be allowed to participate in inspections. They stated that average people usually do not understand the technology being used in mining or extraction. Inspections should be carried out by authorized professionals who understand the science and technology being used in mining. It is the job of these professionals to evaluate the success or problems at each specific site. A commenter stated that, "BLM inspectors should only be accompanied by nonpartisan members of other agencies who would weigh in with experience, knowledge, education and advice. Allowing members of the public with preconceived conclusions and opinions

on mining would only serve to muddy the process and open the operator as well as the BLM to undue harassment, expense and strategic litigation."

One commenter stated that mines and exploration projects usually provide tours to any interested people. These tours are designed to show and explain the mining process. People who want to comment after tours could easily do so to the inspection and enforcement agencies.

Specific commenter objections to the BLM proposal included the following:

Undue influence–The only members of the public likely to accompany a BLM inspector onto a mine site are apt to be political opponents of the mine or other individuals with anti-mining agendas looking for a means to harass the mine operators. To allow "biased environmentalists" along will create unnecessary and undue influence.

Safety considerations–Allowing the public on mine sites with BLM inspectors poses an unacceptably high risk. There is no guarantee or assurance of personal safety for visitors. The Mine Safety and Health Administration (MSHA) requires that BLM inspectors have MSHA training to enter certain hazardous areas of the mines such as pits and mills. Citizens do not have that level of training and would not be allowed in most areas of a mine. Untrained people could cause serious accidents, if not a fatalities.

Liability–BLM and mine operators could incur liability for injury or death of the public or BLM people resulting from untrained people being allowed on mining sites. BLM could be liable for public claims of exposure to toxic chemicals while at mines or mill sites. BLM people could be at increased risk for being responsible for the untrained accompanying public. One commenter asserted that it is unreasonable to require the company to carry liability insurance for the public at large on-site and it is also unfair to BLM employees. There is no place for the public on mine sites unless the company provides the tour and can set access limits. It is unreasonable for the Federal Government to establish regulations that create unnecessary risk to the industry and the public, unless the government is willing to assume all liability created by this action.

Authority–Commenters asserted the "BLM does not have the authority to allow citizen inspections, and therefore the citizen inspection provision should be deleted. FLPMA is silent on this issue and cannot be cited as providing such authority.... In fact, FLPMA prohibits such citizen inspections.... Citizens cannot be permitted to accompany BLM inspectors without the specific consent of the mine operator." A commenter asserted that allowing members of the public to accompany BLM officials when they make inspections would be a government authorization of trespass.

Confidentiality–Allowing the public to accompany BLM officials during a site inspection raises serious issues of confidentiality. "There is nothing in the proposal to constrain

citizens from disseminating and disclosing information about the confidential business materials and processes they may encounter during an inspection. Nothing could stop a potential competitor from accompanying BLM as a ruse to obtain such information, and due to the difficulty in proving disclosure of confidential information, it would be hard to rewrite this provision in a manner that would allow meaningful policing of a nondisclosure agreement." A company whose shares are traded on any stock exchange cannot allow members of the public to gain insider information that would affect the trading of the company's stock. This issue is of critical importance during exploration stages when a mineral discovery is being made.

Vandalism and Theft–Small miners have a lot of supplies and small equipment at their remote mining camps. Visits by non-BLM people to claims might result in vandalism, loss of equipment, or both. Citizens entering mining operations could learn where each piece of equipment is located and what is vulnerable to acts of destruction.

Workload–Public participation in field inspections could be a cumbersome task if enough people show up at some remote site and need to be transported. "BLM should also consider how the presence of the public may affect the conduct of an inspection. Certainly, a trained inspector who is familiar with a mine site will be considerably slowed by the presence of untrained members of the public. Longer inspections will require more inspectors or fewer inspections will be completed."

Comments also questioned how citizen involvement in inspections would work. For instance, if BLM visits the site, is this the point when the proposed citizen inspector accompanies the BLM inspector? Will the operator be told that citizen inspectors are coming, and under what circumstances will the inspection be conducted?

Support for Public Participation in Inspections

15.15 **Comment:** Some commenters supported public participation in inspection and monitoring. Support comes from those who distrust the agendas of the mining industry and BLM. Supporters noted that citizens should have access to public lands and that BLM should allow citizens to accompany BLM employees on mine inspections to ensure against violations of regulations. One commenter asserted that public involvement in mine inspections is merely an extension of open government and should be part of the privilege of operating on the public lands. "The lands the mining companies use are public lands, which the public should be allowed to visit, especially during these inspections, because the mining company is present during these inspections.... to balance that 'undue influence' on the inspectors from the mining companies, the public should have their own people present too. This would create a balance among the miners, the public, and the government caught in between." A commenter supporting the BLM proposal agreed that public involvement in mine inspections must depend upon a lack of significant safety concerns.

Allow the Public on a Case-by-Case Basis–A commenter agreed that the public should be kept away from any potentially dangerous situations such as underground mines but asserted that there are safe opportunities for the public to view what is going on. Allowing inspections may have to be considered on a case-by-case basis rather than opening everything up to inspections as was proposed. The commenter asserted that the public should be allowed to see what's happening, with some restrictions, and the mining industry should be willing to go along with that, especially since they are always complaining about the public not understanding the industry.

Response: BLM has carefully considered all of the comments on the public accompanying BLM inspectors on inspections, as well as its own experience on those few occasions when the public did accompany BLM inspectors. BLM has decided not to finalize the provision as proposed. Many of the objections and risks pointed out by the commenters have merit. In addition, BLM's experience is that site visits typically become more like tours than inspections, and inspectors have to reinspect operations to perform their jobs properly. Thus, BLM has concluded that the provision as proposed would not be workable.

Enforcement

15.16 **Comment:** Commenters supporting the proposal stated that strengthening BLM's administrative enforcement mechanisms and penalties for enforcing its surface mining regulations will help prevent unnecessary or undue degradation of public land resources by mining, and wanted particularly to endorse the enforcement and penalty provisions in 3809.600 and .700. By not strengthening its administrative sanctions, the commenters asserted, BLM sends a message that it does not care about the health and welfare of the citizens and of the environment. Commenters stated that all of BLM's proposed changes are for naught if enforcement is not strengthened, and that stiff fines and the real threat of losing the right to mine are needed to prevent harm to the taxpayer, environment, and local community. Commenters stated that if mining companies can't meet these standards, they shouldn't be permitted to mine. Some commenters stated that mining companies have shown through the years that they will not conduct environmentally responsible operations unless forced to by law. Therefore it is extremely important that enforcement be strong.

Response: BLM agrees that it is important to have strong enforcement remedies to help prevent unnecessary or undue degradation of the public lands. BLM recognizes that many operators conduct operations responsibly in compliance with regulatory standards. These final rules will not impede such operators in continuing their lawful conduct. On the other hand, violations do occur, and BLM must be able to deal with those in a firm but fair manner. The rules give BLM the flexibility to take enforcement action when warranted, or to defer such action if violations will otherwise be timely corrected.

15.17 **Comment:** Commenters opposing the proposal asserted that BLM misled the public in the draft EIS by stating, as a "gap" not adequately covered in the existing 3809 regulations, "BLM lacks provisions for suspending or nullifying operations that disregard enforcement actions or pose an imminent danger to human safety or the environment." In support of its assertion, the commenter stated that previous 3809 regulations adequately addressed the issue of enforcement, and referred to previous section 3809 .3-2 "Noncompliance" that mining operations issued a notice of noncompliance pursuant to the regulations may be enjoined by a court order from continuing such operations and be liable for damages for unlawful acts. Other commenters pointed out that earlier BLM changes to its "use and occupancy" rules in 43 CFR part 3710 addressed the only enforcement needs BLM identified in 1992. Commenters asserted that the BLM also fails to consider authority under the Resource Conservation and Recovery Act (RCRA), or authority delegated from the President of the United States to use the tools of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) to address noncompliance and "imminent dangers."

Response: BLM's existing rules do not give adequate enforcement authority. Notices of noncompliance are not self-enforcing, and BLM cannot compel compliance without seeking judicial enforcement, a lengthy and uncertain process that does not necessarily lead to immediate compliance. See the NRC (1999) report, page 103. These proposed final regulations will increase incentives for operators to correct violations in a timely manner.

Although BLM's "use and occupancy" rules adopted in 1996 (43 CFR subpart 3715) address certain abuses on the public lands, these rules are somewhat limited in the types of activities regulated, focusing largely on whether activities are "reasonably incident" to mining. The enforcement rules adopted today are broader than the 1996 rules and cover all activities the operator engages in, and in particular whether unnecessary or undue degradation occurs.

BLM acknowledges that RCRA and CERCLA provide a basis for enforcing certain activities and will work with EPA as appropriate so as not to duplicate enforcement actions. But BLM needs its own enforcement provisions as the land manager of the public lands.

15.18 **Comment:** Some commenters asserted that other enforcement exists. For instance, operations that pose an imminent danger to human safety on public lands are under the jurisdiction of the U.S. Department of Labor, Mine Safety and Health Administration, whose regulations at 30 CFR [Section]57.1800 "Safety Program," require operators to inspect each working place at least once each shift for conditions that may adversely affect safety or health, and promptly initiate action to correct such conditions. In addition, conditions that may present an imminent danger require the operator to withdraw all persons from the area affected until the danger is abated. These inspections must be

recorded and be available to the Secretary of Labor or his authorized representative. Others asserted that state regulatory inspection and enforcement are sufficient.

Response: BLM recognizes that other federal and state enforcement agencies share the responsibility for regulating mining operations on the public lands, and that with respect to certain matters, other agencies will have the lead responsibility. BLM will work with these agencies so as not to duplicate enforcement, and to refer violations to other agencies as appropriate. Despite this coordination, BLM believes it important to have its own enforcement actions to assure the prevention of unnecessary or undue degradation of the public lands.

15.19 **Comment:** Other commenters urged a program based on cooperation: Cooperate with the obviously good operators, enlist their support and help, create a feeling of trust, and follow through with a positive program. Some felt that current rules were not adequately enforced until recent years and that there was little effort to take serious violators to task. Some thought that it is inappropriate to dwell on the one or two "bad apples" of mining, such as the Summitville situation in Colorado or the Zortman-Landusky situation in Montana. One commenter asserted that both of these situations are in states that have very stringent environmental laws and that if these laws had been enforced and monitored, the environmental problems probably would not have occurred.

Response: BLM agrees that it is important to cooperate with the industry, and vice versa. BLM intends to work with the industry to assure compliance with its rules, but is adopting the new rules to provide remedies where needed. Although the high-visibility problems mentioned by the commenters perhaps could have been limited or avoided through better enforcement of existing authorities, these problems do show the high risks and dramatic consequences of mining operations. Stronger enforcement tools will allow more effective BLM intervention if other agencies need BLM assistance.

15.20 **Comment:** If it proceeds with this final rulemaking, BLM will indeed change the way the surface management regulations are working on the public lands. It will change the regulatory system from one that encourages cooperation between mine operators and regulatory agencies into one that relies upon confrontational enforcement authorities.

Response: BLM will continue to encourage cooperation between the regulated community and the regulators. Enforcement actions are discretionary and will be used when needed, but cooperation and voluntary compliance remain important.

15.21 **Comment:** The information given the public in the draft EIS and preamble was misleading and self-serving and violates the conditions of several court rulings, NEPA, Department of the Interior policy and regulations, and the Administrative Procedures Act.
Response: BLM perceived a need to strengthen its enforcement remedies and so informed the public in the draft EIS and the proposed rule. People's views may differ

from BLM's, but that does not mean that BLM activities are legally insufficient.

15.22 **Comment:** BLM could make better use of the enforcement tools it now has by improved implementation and training.

Response: BLM agrees that improved implementation and training are useful, but they do not negate the need for better enforcement tools.

15.23 **Comment:** For consistency in enforcement the same definitions and standards should be applied for all federal lands, regardless of which agency manages them (e.g. BLM, U.S. Forest Service, etc.), referring to as an example, the 5-acre limitation on disturbance. A number of commenters repeated the theme that BLM and the U.S. Forest Service should have comparable provisions and definitions.

Response: Although the goal of BLM and the Forest Service's having the same definitions and standards is laudable, the two agencies operate under different organic statutes and have different management responsibilities. BLM will continue to confer with the Forest Service to see whether common standards are possible.

15.24 **Comment:** It is premature to conclude that more enforcement and penalty provisions are needed in the absence of information (other than anecdotal) showing whether existing authorities are being consistently applied.

Response: BLM disagrees that it should wait for further information before updating its enforcement regulations. The enforcement provisions adopted today provide practical methods for BLM to assure compliance with its rules. Hopefully, commenters are correct and BLM will not have the widespread need to use enforcement actions to compel compliance, but it is helpful to have such authority to use when necessary. Moreover, the existence of such remedies, whether employed or not, should help prevent unnecessary or undue degradation of the public lands.

NRC Recommendation 6

15.25 **Comment:** Recommendation 6 in the NRC report states that BLM should have both (1) authority to issue administrative penalties for violations of the hardrock mining regulations, subject to due process, and (2) clear procedures for referring activities to other federal and state agencies for enforcement (NRC 1999, page 102). The committee found that administrative penalty authority should be added to the array of enforcement tools make the notice of noncompliance a credible and expeditious means to secure compliance (NRC 1999, page 103).

Commenters asserted that the NRC concluded that BLM does not have administrative penalty authority under current law. One state agreed that congressional action would be needed to give BLM authority to issue administrative penalties. Therefore, it considered NRC Recommendation 6 a proposal for legislative change, not a change in the regulations. In addition, the commenter noted that the NRC Committee endorsed only administrative penalty authority. The commenter concluded that proposed revisions to the 3809 regulations include broad new inspection and enforcement authority for BLM, which is neither authorized by statute nor required to administer an effective program.

Response: BLM disagrees with the commenters' assertion that the NRC report concluded that BLM did not have authority to establish administrative penalties. The NRC was neutral on the issue of BLM authority to establish administrative penalty authority and stated that BLM should seek more authority from Congress "if statutory authorization is necessary...." (page 104). BLM also disagrees with the characterization of the Recommendation as solely a proposal for legislative change. The NRC report discussion (page 104) made it clear that if authority exists, BLM should otherwise revise and expand the existing enforcement provisions in the 3809 regulations to include administrative penalty authority for violations of the regulations.

15.26 **Comment:** Commenters concluded that because the NRC report recommended no changes in regulatory provisions on inspections and enforcement apart from the administrative penalty recommendation, the proposed enforcement revisions are inconsistent with the recommendations of the NRC report. Commenters suggested that to remain consistent with the recommendations of the report, BLM should defer any proposed changes in the inspection and enforcement provisions of the regulations until it has implemented those measures recommended by the NRC Committee to improve efficiency and the use of staff and resources to implement the existing inspection and enforcement requirements.

Response: BLM disagrees that the final enforcement rules are inconsistent with the NRC report recommendations. BLM construes the term "administrative penalty" as used by the NRC to encompass the full range of proposed administrative sanctions, including suspension and revocation orders, as well as monetary penalties. Recommendation 6 was intended to make notices of noncompliance a credible and expeditious means of securing compliance (NRC 1999, page 103), and the NRC report stated in connection with the recommendation that an operator be given the opportunity to rectify the circumstance of noncompliance (page 104). This applies equally to suspension and revocation orders, as to monetary penalties. To the extent that the NRC Report recommendations simply do not address certain provisions of the final rule, such as inspection, no inconsistency exists with the recommendations. Therefore, there is no need to defer changes to the inspection and enforcement rules for purposes of consistency.

15.27 **Comment:** Other commenters asserted that the NRC report supported establishing a

"mandatory" enforcement program for regulating mining on federal lands. They stated that the NRC report affirms that a clear and effective enforcement is needed to replace the existing enforcement mechanisms, and the Department of the Interior's proposed rules need to be strengthened to achieve the goals of this recommendation. The commenters stated that this recommendation makes clear that BLM on-the-ground enforcement is imperative to protecting against unnecessary or undue degradation. The commenters focused on a passage in the NRC report that states, "[f]ield-level BLM and Forest Service personnel told the committee that they have experienced difficulty, in some cases, in enforcing compliance with regulations and the requirements of notices and Plans of Operations" (NRC 1999, page 102).

The commenters concluded that the best way to assure that BLM field people take the required measures to ensure compliance with the regulations is to make such enforcement mandatory, i.e. require BLM to take enforcement action and to assess fines against all observed violations. For instance, a commenter stated that operations that are clearly hazardous to the environment and to human health and public safety should be closed down until brought into compliance. Others suggested that all violations should be documented and, when the health of the watershed is threatened, operations should be ordered to cease until operators can show compliance. Others urged enforcement to protect ground water from violations. Without mandatory enforcement, commenters asserted that BLM field people will experience the same ambiguity and confusion as to what degree of enforcement is suitable.

Commenters objected to the discretionary enforcement system proposed by BLM being rendered meaningless by poorly trained agency staff who are more likely to "try to work things out" with representatives of the mining industry for conflicts over land regulations rather than take action to compel compliance with the regulations. In the commenters' view, even for gross abuse of public resources at a mine site, BLM will not mandate that enforcement actions be taken. The commenters state that this approach to enforcing the proposed regulations fails to create a climate for effective regulation. Thus, some commenters conclude, allowing wholly discretionary enforcement of violations in the field would be inconsistent with the NRC report recommendations.

Commenters representing state regulatory authorities urged BLM to make enforcement discretionary, to prevent BLM and the states from getting caught up in disputes as to what constitutes a violation, and to avoid suits to compel compliance with duties established by the rules. Commenters supporting discretionary enforcement asserted that there are many ways to gain compliance, and issuing violations with civil penalties should be looked at as only one possible tool. Some stated that coordination on enforcement with state regulatory agencies is a necessity and states should be allowed to take the lead on enforcement. These commenters asserted that state enforcement can usually occur in a more timely manner, resulting in improved on-the-ground compliance.

Response: BLM agrees that a firmly administered enforcement program will improve compliance but concludes that such a program is possible without mandatory enforcement. Under the final rules, trained professional BLM inspectors will exercise their judgment and take enforcement actions when needed. Mandating enforcement action for every violation, no mater how small, would clog the system with unnecessary administrative proceedings and delays and tend to create the confrontational atmosphere that BLM, the states, and the regulated community wish to avoid. BLM intends to coordinate with state regulators and, where appropriate to assure timely compliance, allow other federal agencies and states to take the enforcement lead. What BLM has tried to do in these regulations is to provide enforcement tools for BLM inspectors so they will not be hamstrung by the lack of administrative remedies. Providing these tools will strengthen BLM enforcement, without requiring that operators be cited for every violation. BLM also disagrees that the NRC report recommends that BLM enforcement be mandatory rather than discretionary. To the contrary, the NRC report suggests that BLM acknowledge and rely on enforcement authorities of other federal, state, and local agencies as much as possible (NRC 1999, page 104).

Authority

15.28 **Comment:** One theme addressed repeatedly by the comments is BLM's authority to promulgate the administrative enforcement rules. Some commenters agreed that enforcement is a needed part of any regulatory program but opposed the proposed enforcement rules as exceeding the BLM's legal authority under FLPMA. The commenters reasoned that FLPMA provides express enforcement authorities, both civil and criminal, and BLM is limited to the bounds of the statutory provisions. These commenters asserted that when Congress intends to grant administrative enforcement and penalty mechanisms, it provides specific statutory authority, which does not appear in FLPMA. For example, in the context of regulation of the mining industry, Congress has done so in the Federal Mine Safety and Health Act of 1977 and in the Surface Mining Control and Reclamation Act (SMCRA). Proposals that commenters asserted go beyond BLM's authority include suspension and revocation orders, administrative civil penalties, and criminal penalties.

Response: BLM disagrees with the comments. Multiple provisions of FLPMA and one under the Mining Law of 1872 authorize establishing administrative sanctions, including suspension and revocation orders and monetary civil penalties. These provisions include the first and last sentences of 43 U.S.C. 1732(b), 43 U.S.C. 1732(c), the first sentence of 43 U.S.C. 1733, 43 U.S.C. 1740, and the authority to prescribe regulations under 30 U.S.C. 22 (R.S. § 2319). BLM also disagrees with the commenters' assertion that the provision allowing the Attorney General to seek the judicial imposition of injunctive or other judicial relief, 43 U.S.C. 1733(b), limits the Secretary of the Interior's administrative authority. That section, together with a portion of 43 U.S.C. 1733(a) establishing criminal violations, provides affirmative authority for judicial enforcement but do not address or

limit the scope of the Secretary's authority to regulate activities on the public lands under other provisions of FLPMA and to establish administrative enforcement remedies.

15.29 **Comment:** Commenters stated that BLM's previous subpart 3809 regulations reflect the correct interpretation of FLPMA enforcement authorities, and discussed the history of the previous enforcement rules. In the Subpart 3809 regulations as originally proposed (41 Fed. Reg. 53428) (Dec. 6, 1976), section 3809.2-5(b) would have authorized initiating suspension of operations if BLM determined the existence of "significant disturbance of... surface resources...unforeseen at the time of filing the Plan of Operations." Id. at 53431. Suspension would have been obligatory for operations, or parts thereof, that were "unnecessarily or unreasonably causing irreparable damage to the environment." Id. (See also proposed sections 3809.4-1 and 3809.4-2 Id. at 53432.) But these provisions were not included when BLM reproposed the Subpart 3809 rules on March 3, 1980. 45 Fed. Reg. 13956, explaining, "After further examination of the authority of the Secretary to issue these regulations, it has been decided that [BLM] will not unilaterally suspend operations without first obtaining a court order enjoining operations that are determined to be in violation of the regulations." Id. at 13958. Thus, the commenters concluded the Interior Department's contemporaneous interpretation of FLPMA was that the Department lacked administrative authority to suspend operations on mining claims without first obtaining injunctive relief pursuant to section 1733(b) of FLPMA.

Response: BLM acknowledges that the previous rules reflected a permissible implementing of FLPMA, but not the only permissible one. BLM 's earlier approach was to ask the Attorney General to initiate a civil action under 43 U.S.C. 1733(b) for failure to comply with a notice of noncompliance, without the intermediate step of BLM issuing an administrative order, for instance, directing an operator to suspend its operations. Section 1733(b), however, does not circumscribe the Secretary's actions before the Secretary asks that a civil action be initiated. The current rule takes a different approach than the previous rules, one that is also consistent with Section 1733(b). Under these proposed final regulations, before seeking judicial enforcement BLM may issue enforcement orders in addition to issuing a notice of noncompliance, including issuance of suspension orders, plan revocations, or monetary penalties. If an operator does not comply with any of these administrative orders, the Secretary may then seek judicial enforcement under section 1733(b).

15.30 **Comment:** Commenters asserted that Congress apparently limited BLM's enforcement authority because it authorized the Secretary of the Interior to achieve "maximum feasible reliance" upon state and local law enforcement officials in enforcing the federal laws and regulations "relating to the public lands or their resources." 43 U.S.C. at 1733(c)(1).

Response: BLM disagrees with the commenter's interpretation of section 1733(c) of FLPMA. FLPMA Section 1733(c)(1) authorizes the Secretary of the Interior to enter into contracts for the assistance of and use local officials in enforcing federal laws and

regulations for the public lands or their resources. That section does not constrain the Secretary from establishing needed enforcement regulations.

15.31 **Comment:** Commenters asserted that BLM's reliance on Section 302(c) of FLPMA, 43 U.S.C. 1732(c), to justify suspensions or revocations of Plans is misplaced. FLPMA Section 302(c) provides suspension and revocation authority for "instrument[s] providing for the use, occupancy or development of the public lands." The commenter asserted that a Plan of Operations under the 3809 regulations is not "an instrument providing for the use, occupancy, or development of the public lands...," because the Mining Law of 1872 already authorizes the "use, occupancy, or development of the public lands." In the commenter's view, the Plan of Operations is simply an administrative means of regulating that development to prevent unnecessary or undue degradation of the public lands as addressed by FLPMA. A commenter asserted, moreover, that Section 302(c) does not apply to mining operations because Section 302(b) provides that no provision of the act shall "in any way" amend the Mining Law of 1872 unless that provision is specifically cited.

Response: BLM disagrees with the assertion that Plans of Operations are not instruments providing for the use, occupancy, or development of the public lands, and that suspension or revocation of a Plan of Operations under FLPMA section 302(c) interferes with an operator's rights under the Mining Law of 1872. Rights under the Mining Law are subject to the FLPMA section 302(b) requirement to prevent unnecessary or undue degradation of the public lands. Approval of the Plan of Operations is the key to allowing use, occupancy, and development so as to prevent unnecessary or undue degradation. Until BLM approves a Plan of Operations, an operator cannot use, occupy, or develop its mineral interests in the public lands even if it has rights under the Mining Law. Thus, a Plan of Operations is the instrument allowing an operator to proceed with its use, occupancy, or development. And suspension or revocation of the Plan of Operations for violating a Plan does not interfere with operator's rights under the Mining Law because such rights depend upon operator compliance with the approved Plan. Accordingly, section 302(c) is a statutory basis for the sections providing for suspension and revocation of Plans of Operations.

15.32 **Comment:** A commenter requested that the new regulations clearly state when BLM will refer a documented noncompliance to the Department of Justice for judicial action. The commenter stated that this information should also describe and evaluate the consequences of any differences among the Department of Justice units having jurisdiction over mining and how these differences can be resolved to assure that all similar documented noncompliances are treated in similarly.

Response: Subpart 3809 does not cover the standards for referral to the Department of Justice for judicial enforcement. These standards will either be handled on a case-by-case basis or be the subject of BLM guidance.

15.33 **Comment:** Several comments supported BLM's proposed enforcement rules. For instance, EPA supported BLM's proposed regulations at 3809.601 and 602, including the authority for BLM to suspend operations, and at 3809.702-3 to issue administrative civil penalties based on noncompliance with the subpart. Commenters stated that BLM clearly needs to have the tools to shut down a "renegade" mining operation or jail a "renegade" operator. One commenter pointed out that when BLM issues a record of decision based on a final EIS, the operator is responsible for carrying out the Plan as specified. If the operator makes changes without BLM analysis and approval, BLM should have the authority to levy fines and suspend operations.

Response: BLM agrees with these comments and has kept these provisions in the proposed final regulations.

Permit Blocks

15.34 **Comment:** A number of commenters recommended adopting a rule that would prevent BLM from approving future Plans of Operations for operators with unresolved noncompliances until the violations are corrected. A commenter stated that the new rules–while certainly an improvement–do not allow BLM to reject an operation outright. These commenters asserted that BLM needs the ability to block historically irresponsible operators as well as parent and subsidiary companies from obtaining new mining permits. These commenters believed that denial of Plans of Operations is an important tool to protect public lands and waters from environmental damage. One state suggested language preventing the operator from obtaining a permit anywhere on public lands until all compliance issues have been resolved to BLM's satisfaction. That state said it uses a permit block section and has found it to be useful, especially in addressing repeat offenders.

Response: Although BLM understands the effect of a permit block provision, we chose not to include such a provision in the Proposed Action. A permit block provision is analyzed in the EIS Alternative 4.

Citizen Suits

15.35 **Comment:** Citizens should have the right to sue to correct violations.

Response: Such a provision is beyond BLM's authority and would require a legislative change.

Section 3809.601

15.36 **Comment:** Commenters stated that for the mainstream mining industry, a notice of noncompliance will almost invariably resolve the problem without protracted controversy.

These commenters asserted that mine operators have enormous incentives to maintain positive and cooperative relations with federal land management agencies and that judicial enforcement is pursued in rare instances of recalcitrant operators, usually where people are engaging in sham operations. The commenters concluded that the rare use of judicial enforcement authorities in the past attests to the lack of need for new enforcement authorities today.

Response: BLM agrees that in many instances notices of noncompliance will lead to successful resolution and abatement of violations. In some instances, however, notices of noncompliance will not completely resolve the issue, and the danger of harm will continue. That is when the other remedies can prove useful. The rare use of judicial enforcement in the past may also be attributed to the difficulty of successfully initiating civil actions rather than the lack of need for such actions.

15.37 **Comment:** Commenters asserted that in both subparagraphs of section 3809.601(b), BLM officials should not be authorized to shut down operations unless there is both a significant violation that may result in environmental harm and that substantially deviates from the completed Notice or approved Plan of Operations.

Response: BLM believes that a suspension is warranted under section 3809.601(b)(2) in either situation when an operator fails to correct the significant violation within the allotted time. The danger of environmental or other harm from an unabated violation justifies a suspension. And BLM also believes that it should be authorized to direct an operator to suspend activities that substantially deviate from what was approved.

15.38 **Comment:** The proposed rules are entirely too vague and leave too much power in the hands of a few BLM employees. For instance, the rules would leave to the BLM inspector's discretion just what is imminent danger or harm to the public health, safety, or the environment. No business should be shut down without a ruling by a federal judge.

Response: In implementing the procedure contemplated by FLPMA section 302(c), trained BLM inspectors will carefully exercise their judgments. In the absence of imminent danger, an operator can raise objections to the state director. And operators will be able to immediately appeal temporary immediate suspensions to the Interior Board of Land Appeals. Although judicial rulings may ultimately occur, BLM has the initial responsibility to administer the provisions of FLPMA, including section 302(c).

15.39 **Comment:** The proposed rule allowing BLM to order a temporary suspension without issuing a noncompliance order violates the principle of due process to which all people and companies are entitled under U.S. law. Suspension and revocation orders indefinitely shutting down entire mine operations (without even a hearing, as the temporary suspension authority would allow), would "impair the rights of" locators under the mining laws. Such enforcement authorities cannot reasonably be implied from the general

mandate to prevent unnecessary or undue degradation of the public lands. Furthermore, if the rules are finalized as proposed, a temporary suspension order presumably would be considered final agency action because there are no provisions for a hearing either before or within a reasonable time after the suspension. Thus, the party adversely affected by such action may seek review and relief from a federal district court pursuant to the Administrative Procedures Act.

Response: Due process is satisfied through the administrative appellate process. Any BLM enforcement order may be appealed to the Interior Board of Land Appeals, and a stay may be requested under the provisions of 43 CFR 4.21. Thus a temporary suspension is not final agency action, for which review is available in federal court. BLM enforcement actions do not impair rights of claimants under the mining laws because such rights do not include the right to operate in a manner that causes unnecessary or undue degradation.

15.40 **Comment:** BLM should revise proposed section 3809.601(b) to substitute the term "unnecessary or undue degradation" for language like "imminent danger or harm to the environment." There is only one primary authority for BLM to issue a noncompliance or temporary suspension: the approved Plan of Operations is not being followed, and BLM has determined that the variance is significant.

Response: Although BLM recognizes that failure to comply with the regulations and an approved Plan of Operations constitutes unnecessary or undue degradation, the suspension rules implement FLPMA section 302(c), as well as FLPMA section 302(b). BLM believes that the terminology of the final rule provides a better sense of when suspension orders can be issued than the use of the phrase "unnecessary or undue degradation."

15.41 **Comment:** BLM and the Forest Service should use comparable standards for noncompliance and temporary suspension.

Response: Although we recognize the advantages of having both agencies using comparable standards for noncompliance and temporary suspension, the two agencies' regulations are based on different authorities.

15.42 **Comment:** BLM should revise section 3809.601 to name the responsible BLM official for issuing noncompliance and suspension orders and to include the place and time of any appeal so that there is a clear understanding of the Department of the Interior administrative appeal process. Because the appeal process varies according to the level of the BLM official signing the order, everyone must know that process.

Response: In addition to subpart 3809 specifying appeal procedures in section 3809.800, each enforcement order ordinarily will inform recipients of their appeal rights.

15.43 **Comment:** The suspension order process proposed by section 3809.601 is too cumbersome for a declining BLM workforce. BLM should clarify that the BLM notification of its intent to issue a suspension order (section 3809.601(b)(1)(ii)) can be combined with notification of the opportunity for an informal hearing (section 3809.601(b)(1)(iii)).

Response: The process set forth in section 3809.601(b) is needed to implement the notice and hearing requirement of FLPMA section 302(c). BLM agrees with the commenter that the BLM notification of its intent to issue a suspension order (section 3809.601(b)(1)(ii)) can be combined with notification of the opportunity for an informal hearing (section 3809.601(b)(1)(iii)).

15.44 **Comment:** Once an operator files for bankruptcy, the operation should automatically receive a record of noncompliance subjecting all Notice- and Plan-level operations to a higher level of compliance enforcement (more frequent inspections), bonding, and penalties. The rule should include a provision for EPA or a state environmental agency to petition BLM to suspend operations or withdraw a Plan of Operations if there is a continued history of noncompliance with environmental regulations.

Response: BLM agrees that the operations of an entity that files for bankruptcy should be subject to continual scrutiny to assure that regulatory obligations are satisfied. This can occur without a specific provision in the regulations. BLM also agrees with the commenter that it is important to assure the adequacy of the financial guarantee of an operator in bankruptcy. BLM believes, however, that enforcement should await the occurrence of violations and that a bankruptcy filing does not necessarily represent the existence of violations. Once a violation occurs, BLM will take whatever action is best to assure that the violation will be corrected.

15.45 **Comment:** Under 43 U.S.C. 1732(c) an immediate temporary suspension is separate from rather than a subtype of a suspension. For the sake of more clearly distinguishing between the two types of suspension orders, the labeling in 3809.601 should be changed to the following: (a) noncompliance order, (b) suspension order, (c) immediate temporary suspension order, and (d) contents of enforcement orders. These proposed subdivisions would more faithfully represent the intent of 43 U.S.C. 1732 (c) and also make this section more understandable to the public by clearly differentiating between a suspension order and an immediate temporary suspension order, which is one of the goals of rewriting these regulations in "Plain English." In addition, this proposed labeling would allow for a complete one-to-one correlation with the set of orders identified in 43 CFR 3715.7-1, except the suspension order being called a cessation order in section 3715.7-1.

Response: BLM has chosen not to make these suggested changes because the suggested reordering does not appear to be needed because it would not differ much from the final and proposed rules. Even with the changes there would not be a complete correlation

with subpart 3715.

15.46 **Comment:** BLM should revise proposed section 3809.601 to provide that BLM is liable for all owner/operator documented costs from an arbitrary and capricious suspension order that is overturned during the administrative appeal process or from litigation.

Response: BLM is not authorized to and declines to establish BLM liability for its own actions. Every agency's orders are overturned occasionally for various reasons. This is not the basis, however, for holding the regulators liable. BLM does not intend to take enforcement actions in an arbitrary and capricious manner.

15.47 **Comment:** Having informal BLM hearings after BLM issues an enforcement decision violates due process.

Response: The rules do not provide for informal BLM hearings after enforcement actions unless the recipient requests state director review under section 3809.801. After an enforcement action, the recipient may appeal to the Interior Board of Land Appeals.

Section 3809.602

15.48 **Comment:** Although revoking a Plan of Operations is the last step in the enforcement process, it must be used where other enforcement orders have failed to compel compliance with the regulations governing mining on public lands. BLM must be willing to stop an operation in which major environmental damage is occurring or other impacts are taking place when all other efforts to stop the problem have failed. Sec. 3809.602(a) should be revised to change the "may" to "shall," to make permit revocation mandatory. BLM's mandate to prevent "unnecessary or undue degradation" is not discretionary–it is a mandatory duty. *Sierra Club* v. *Hodel*, 848 F.2d 1068 (10th Cir. 1988). This revision would also be consistent with the NRC report recommendations.

Response: We agree that it is important to achieve operator compliance with our regulations and have provided a range of actions we can take, including administrative enforcement orders such as suspension and revocation, administrative penalties, and judicial intervention. The proper remedy may differ in individual cases, but the rules provide flexibility for us to use, whichever one will cause the violations to be corrected. A remedy is required to prevent unnecessary or undue degradation, but we have discretion in how to achieve that goal.

15.49 **Comment:** BLM should revise proposed section 3809.602 to inform operators that BLM will revoke their Plans of Operations or nullify their Notices if they don't properly maintain their financial guarantees.

Response: We will do what is needed to achieve compliance, but we have a variety of

means to do so. Plan revocation is only one such means.

15.50 **Comment:** BLM's revoking a Plan of Operations for a single violation is too harsh a penalty.

Response: BLM generally agrees that a Plan of Operations should not be revoked for one violation. But if the violation is significant enough, with the potential to cause serious harm, and the operator refuses to correct the violation, BLM needs to be able to consider whatever remedy will best achieve compliance.

15.51 **Comment:** BLM should revise proposed section 3809.602(c) to clarify that operators can continue to use equipment and perform needed reclamation following the suspension or revocation of a Plan of Operations. What form of authorization will BLM use? Who is the responsible BLM official to issue that authorization? To what extent, if any, will the public and other federal, state, local, native, and private surface ownership have input to the new BLM authorization?

Response: Revoking a Plan of Operations does not terminate an operator's obligation to satisfy outstanding obligations. The authorization to perform the activities to fulfill such obligations can derive from the original Plan or be part of the order revoking the Plan. Because revocation would be a continuation of existing obligations, BLM does not contemplate formal public participation. On the other hand, BLM intends to coordinate with state and other interested federal agencies before revoking a Plan of Operations.

Section 3809.603

15.52 **Comment:** We object to proposed 3809.603(a)(1), which allows BLM to serve an enforcement action on an person at the project area who appears to be an employee or agent of the operator. Considering the seriousness of enforcement actions under these regulations, this method of service does not comply with the principles of due process. This section should be revised to require BLM to serve notices by certified mail or personally on the person the operator designated as authorized to accept service.

Response: The final rule will continue to allow service to be complete on the basis of actions at the project area because persons conducting activities at the site of an operation will ordinarily be responsible. But BLM agrees that an information copy should be promptly mailed to the operator or the operator's agent to notify responsible management persons not at the mining site of the BLM actions.

15.53 **Comment:** BLM should revise proposed section 3809.603 to require BLM to provide a copy of any noncompliance or suspension order to all other federal, state, and local entities that have permits or authorizations and Native entities and private landowners of the surfaces that are directly linked with the BLM-approved Plan of Operations.

Response: We intend to consult with other regulators, both state and federal, when it takes enforcement action. Private entities, however, will not ordinarily be party to enforcement actions and will not necessarily receive copies of enforcement orders.

Section 3809.604

15.54 **Comment:** Civil actions should be brought by states rather than in federal court as specified in proposed Section 3809.604 because state procedures tend to be quicker, more cost-effective, and more outcome-based than federal actions, and the implementing of federal enforcement will be delayed by the Department of the Interior appeals process.

Response: Section 3809.604(a) identifies the availability of civil actions in U.S. district courts, as provided in FLPMA section 303(b) but does not preclude states from enforcing their programs in state courts. BLM will work with state regulators to determine which entity–state or federal–should have the enforcement lead, and the proper judicial forum to initiate any required civil action.

Additional Definitions Requested

15.55 **Comment:** BLM should define terms used in the enforcement context. These include "noncompliance order" as used in .601(a), "suspension orders" as used in.601.(b), "immediate, temporary suspension" as used in.601(b), "imminent danger or harm" as used in .601(b)(2)(ii), "violation" as used in .702, and "pattern of violations" as used in .602(a)(2). Specifically, the BLM standard or threshold must be included to avoid ambiguity and arbitrary and capricious application by the responsible BLM field official.
Response: Implementation will occur on a case-by-case basis. Where necessary, BLM will issue guidance to assure consistent application of the enforcement provisions.

Section 3809.700–Criminal Penalties

15.56 **Comment:** We object to the criminal sanctions provision, proposed 3809.700. That provision is beyond the scope of BLM's FLPMA authority and would unintentionally criminalize actions that are not properly subject to prosecution. These are rules and not laws, and they should not assign criminal penalties. Under no circumstances should BLM or the Department of the Interior be given authority to file criminal charges against a citizen of this country.

Response: These rules do not establish new criminal sanctions, and BLM does not file criminal charges. These rules are intended to bring existing criminal provisions to the attention of the regulated community, and for that reason they are included in subpart 3809. The conduct that is criminal is provided for in 43 U.S.C. 1733(a).

15.57 **Comment:** We object to establishing across-the-board criminal penalties for any knowing and willful violations of the requirements of subpart 3809. This is unjustified overkill, and in no other public land management program does BLM establish that it is a crime to violate any provision of an entire subpart. Rather, in other public land management programs BLM has taken the essential effort of distilling those substantive violations that will be subject to criminal sanctions. BLM should either specifically list in the rule operator actions that are so serious as to justify criminal sanctions or delete the entire section. The preamble must state the basis for BLM's conclusion that it needs to have the threat of criminal penalties to assure compliance with such "crimes" as the following:

-Submitting an incomplete Plan of Operations.

-Holding financial guarantees that BLM has determined (in its revision of an estimate of reclamation costs under section 3809.552(b) is no longer adequate.

-Failing to modify a Notice under section 3809.331(a)(2) that BLM thinks (and the operator does not think) constitutes a "material change" to the operations.

The list of "violations" of the rules is endless, and most "violations" are minutiae. If a Plan is incomplete, this is not a crime; the Plan must be completed before processing can occur.

Response: Section 3809.605 has been added to the proposed final regulations to include prohibited acts under this subpart. FLPMA establishes that knowing and willful violations of the regulations can be prosecuted under section 1733(a). BLM expects that U.S. Attorneys will continue to exercise their prosecutorial discretion in determining when to bring criminal prosecutions.

15.58 **Comment:** If 3809.700 is just informational, criminal enforcement cannot occur until 43 CFR Part 9260 is changed. Those rules provide "in a single part a compilation of all criminal violations relating to public lands that appear throughout title 43." 43 CFR 9260.0-2. There were and are no provisions of 43 CFR 3809 listed there. In fact, "Subpart 9263-Minerals Management" is "Reserved." Thus, the unrevised Part 9260

remains the controlling, effective criminal penalty rule, and the absence of any provisions in that subpart for hardrock mining operations means there are none.

Response: Although we disagree with the assertion that prosecutions cannot occur under 43 U.S.C. 1733(a) until we change 43 CFR part 9260, we agree that to avoid confusion, subpart 9263 should contain a cross-reference to subpart 3809. Thus, this final rule incorporates such a cross-reference in subpart 9263. Again, the statute controls, regardless of what is in either subpart 3809 or subpart 9263 of BLM's regulations. The absence of such a cross-reference would not invalidate any properly obtained conviction under 43 U.S.C. 1733(a).

15.59 **Comment:** We object to the criminal enforcement provisions as violating the Mining Law. Section 302(b) of FLPMA states that, unless specified otherwise, FLPMA does not amend the Mining Law of 1872. FLPMA section 303 is not listed in section 302(b). There are no criminal penalty provisions in the existing 3809 regulations for this reason. The Secretary of the Interior's authority to prevent unnecessary or undue degradation must be exercised by other, lawful means, not by means that Congress specifically established would not apply to locators or claims under the Mining Law.

Response: Criminal enforcement under 43 U.S.C. 1733(a) neither amends the Mining Law nor impairs rights established under that law. The Mining Law creates no right in any person to violate BLM's lawfully promulgated regulations, particularly those implementing the unnecessary or undue degradation standard of FLPMA section 302(b), which does amend the Mining Law.

15.60 **Comment:** BLM should define the term "knowingly and willingly" as used in section 3809.700. This is especially important since BLM has chosen to include this section only for information purposes.

Response: BLM by regulation will not define an element of a criminal statute. That is for the courts to decide.

15.61 **Comment:** BLM should revise section 3809.700 to make it clear the extent, if any, that this section applies to existing approved mining operations on public lands.

Response: 43 U.S.C. 1733(a) applies by its own terms to any person who knowingly and willfully violates a regulation issued under FLPMA. There is no exception for existing approved operations. To the degree, however, that subpart 3809 excepts existing approved operations from new regulatory requirements, such requirements cannot form the basis for criminal conduct.

Section 3809.701

15.62 **Comment:** Proposed sections 3809.700 and 3809.701 provide excessively severe penalties of from $100,000 to $250,000 fines and/or imprisonment for 5 years for violating the regulations or making of false statements.

Response: BLM is informing the regulated community of existing statutes that contain the penalties the commenters object to. These cannot be changed by BLM regulation.

15.63 **Comment:** Commenters asked, the following questions:
-What does BLM consider to be a false statement?
-Will BLM include false statements or accusation made by private parties against operators during comment period for bonding or other NEPA processes?
-What standards will BLM use to determine if statements are false?

Response: U.S. Attorneys initiate prosecutions under 18 U.S.C. 1001. The courts interpret that law, and a body of case law exists interpreting 18 U.S.C. 1001. BLM defers interpretation of the statute to officials with responsibility to enforce that statute.

Sections 3809.702 and Section 3809.703–Civil Penalties

15.64 **Comment:** BLM enforcement should allow for assessing administrative civil penalties against mining operators. Civil penalties will play a vital role in providing an incentive that operators understand. Enforcement works only if the penalties for being "caught" are far more expensive than the profits to be made through nonperformance. We (EPA) support the authority for BLM to issue civil administrative penalties for noncompliance with subpart 3809.

Response: We agree with the comments supporting the use of administrative penalties.

15.65 **Comment:** A commenter suggested that the penalties BLM collects be put into a fund for reclaiming mine lands and not go into the general Department of the Interior fund.

Response: The suggestion in this comment is beyond the rulemaking authority of the Secretary of the Interior.

15.66 **Comment:** FLPMA is specific about the enforcement authorities given BLM by Congress, stating that 43 U.S.C. 1733(b) allows only the Attorney General to institute civil penalties for violating regulations promulgated by the Secretary of the Interior under FLPMA. The absence of express administrative civil penalty provisions in FLPMA confirms the congressional intent that BLM not impose civil penalties.

Response: BLM disagrees with the assertion that the provision allowing the Attorney

General to seek the judicial imposition of injunctive or other judicial relief limits the Secretary's administrative authority. That section, together with a portion of 43 U.S.C. 1733(a) establishing criminal violations, provides affirmative authority for judicial activity and does not address the scope of the Secretary's authority to establish civil penalties under other provisions of law.

15.67 **Comment:** Although BLM wants new civil penalty authorities to address "bad actors," recalcitrant operators would continue to flout any new BLM administrative authorities, and civil or criminal court action would ultimately have to resolve such problems, as is the case now. BLM's proposed new bonding authorities will help make such cases of noncompliance more clear-cut and make it easier to persuade a U.S. Attorney to pursue such actions.

Response: Although BLM cannot assure that the imposing of civil penalties will always cause entities to come into compliance, the added administrative sanctions will give more incentive for operators to do so. A person may decide to delay correcting a violation to see if a court will issue injunctive relief. But that person may decide to abate a violation in the face of a federal administrative order directing him or her to suspend operations or a continually accruing monetary penalty. BLM also is not persuaded that the existence of new bonding authorities will lead to greater success in bringing civil actions for injunctive relief.

15.68 **Comment:** The NRC report states that "federal land management agencies need to acknowledge and to rely on the enforcement authorities of other federal, state, and local agencies as much as possible" (NRC 1999, page 103). The regulations should incorporate the requirement that BLM defer to enforcement by federal or state agencies with primary jurisdiction over environmental requirements. The regulations should also incorporate the NRC Committee's statement that BLM develop formal understandings or memoranda of understanding with state and federal permitting agencies to prevent duplication and promote efficiency (page 104). The NRC report intended that BLM use the new administrative penalty authority only where it "needs to act immediately to protect public lands or resources, or in cases where the other agency is unable or unwilling to act with appropriate speed" (page 104) and suggested that these limitations should be written directly into the regulations.

Response: BLM agrees with the policies embodied in the NRC report to the extent to which reliance on other agencies will achieve compliance with BLM regulations and public lands and resources will be adequately protected. Including the suggested limits in the regulations, however, could be construed to establish jurisdictional bars to BLM's enforcement. Such limits would complicate individual enforcement actions with issues related to matters such as the extent of BLM reliance on other agencies. These types of issues can lead to disputes between BLM and the states, as is evidenced by the experience of the Office of Surface Mining in implementing 30 U.S.C. 1271. BLM believes it

preferable, instead, to develop understandings and agreements with states and other agencies to properly exercise its discretion to defer to other agencies, without including jurisdictional bars in the BLM regulations.

15.69 **Comment:** The administration of a civil penalty system will impose new and unjustified resource and personnel requirements on BLM, not to mention the states. From a practical perspective, BLM should also consider the procedural issues and complexities of the civil penalty policies and the implementing of similar programs by other agencies, such as EPA. For example, BLM's penalty assessments would likely be the subject of innumerable appeals. That reality should be considered in light of the fact that the Interior Board of Land Appeals is already staggering under a multi year backlog. Appeals stemming from BLM penalty assessments could bring the system to a halt. BLM's assumption of civil penalty responsibilities would impair its capacity to perform its land management responsibilities.

Response: Although the use of civil penalties could increase BLM's workload and add more appellate cases, we disagree that the added resource needs will be as dramatic as the commenters assert. BLM does not expect that many civil penalties will be issued, particularly if states and other federal agencies take the enforcement lead in many instances.

15.70 **Comment:** Proposed 3809.702 provides civil penalties of up to $5,000 per day for violation of the regulations, violation of a Plan of Operations, or failure to comply with an order of the BLM. The draft penalties section is extremely stringent and excessive, considering that a single violation of one of the new performance standards could likely occur even if the operator were diligent, prudent, and acting in good faith. The greatest penalty should be $1,000 per day. A noncompliance order should be issued first, together with an opportunity to cure the violation. Appeals of penalty assessments should be heard in the first instance by BLM state directors.

Response: BLM believes that the administrative civil penalty system is fair. The issuance of monetary penalties in any amount is discretionary. In many instances, BLM will not issue any monetary penalty. The $5,000 per day maximum penalty is just that, a maximum. BLM does not expect that penalty amounts will always approach the maximum, particularly if a violation is an isolated incident and an operator is diligent, prudent, and acting in good faith. The proposed final regulations contain criteria for assessing penalties, with suitable reductions for small entities. Setting a maximum amount of less than $5,000 per day may be inadequate to reflect the harm caused by serious violations.

Before any penalty becomes final, the recipient may petition the Department of the Interior, Office of Hearings and Appeals for a hearing. Thus, a person assessed a penalty can explain extenuating circumstances and seek a reduction in the penalty amount or a

determination that the violation did not occur. The rules allow the BLM state director to be involved in settlements of civil penalties, but for due process purposes, prefers that hearings be held by the Office of Hearings and Appeals, whose Hearings Division has extensive experience with monetary penalty hearings. BLM generally agrees that it will not assess penalties until it has issued a noncompliance and there has been a failure to comply. But occasionally a serious violation may warrant the issuance of monetary penalty, or another agency may have issued the enforcement order and BLM does not wish to duplicate that order.

15.71 **Comment:** Instead of penalties, compliance through financial guarantees should be adequate.

Response: BLM would prefer that an operator correct violations. Administrative enforcement orders and civil penalties give an operator action incentive that does not exist through the financial guarantee. In addition, forfeiting and collecting on a financial guarantee can be a lengthy process and may not be warranted for individual violations.

15.72 **Comment:** BLM should use the judicial system for assessing civil penalties as the only fair way to administer penalties. If a violation is serious enough to warrant a penalty, then the judicial system should administer it. I am concerned about the impartiality of BLM and the Interior Board of Land Appeals (IBLA).

Response: The same difficulties and uncertainties exist for obtaining judicial imposition of civil penalties under 43 U.S.C. as with getting injunctive relief under that section. Persons who believe they are treated unfairly by the Department may appeal an IBLA ruling to a district court.

15.73 **Comment:** BLM should provide a fair appeals process from civil penalties. The process should include a committee of government and industry representatives (such as the one the Department of the Interior has now for considering other issues).

Response: The appeal of a civil penalty involves an individual factual dispute over a specific application of the regulations. This is not the type of proceeding where a committee of multiple interests would add value, such as in making recommendations on policy issues.

15.74 **Comment:** BLM needs to define the term "small entity" as used in section 3809.702(a)(3). The current interpretation of the term conflicts with the term "small business" as used by BLM in 1998 legal briefs defending its earlier bonding rules.

Response: BLM will interpret the term "small entity" consistent with the definition established by the Small Business Administration.

15.75 **Comment:** Does the 30-day appeal period specified in proposed section 3809.702(b) refer to calendar days or business days.

Response: The proposed final regulations include the phrase "calendar days" to clarify this issue.

15.76 **Comment:** A system of positive incentives should be developed in lieu of administrative penalties to encourage environmental stewardship, keeping in mind that financial assurance in the form of reclamation bonds will still be in place to ensure compliance. Also, the rules do not give enough guidance to allow the consistent applying of the administrative civil penalty provisions without imposing the personal biases of individual regulators.

Response: Although it encourages environmental stewardship and positive incentives (such as reclamation awards to operators who provide environmentally superior reclamation), BLM also needs administrative sanctions. These rules provide such sanctions.

APPEALS AND STATE DIRECTOR REVIEW

16.01 **Comment:** Some commenters objected to the granting of appeal rights to an "undefined and open-ended" class of "persons adversely affected by a decision made under this subpart." According to these commenters, the preamble to the proposal contains no rationale for this "wholly unauthorized expansion of rights." Another commenter suggested that BLM should adopt the Alaska standard that administrative appeals and litigation can be initiated only by persons who meaningfully participated in the public participation elements of the decision process. A commenter pointed out the difference in language between proposed section 3809.800(a), which authorized any "person" adversely affected by a BLM decision to appeal the decision under 43 CFR parts 4 and 1840, and the wording of 43 CFR section 4.410, which states: "Any party to a case which is adversely affected... shall have a right to appeal" (emphasis added). The commenter correctly observed that a potential appellant may be harmed by a BLM decision but not be a party to the BLM proceeding. A commenter requested that BLM clarify the discrepancy between these sections by providing for appeal by parties who can show they are adversely affected or have a legitimate interest in the effects of the action either on or off site.

Response: The final rule limits appeals to "parties."

16.02 **Comment:** I thought that the intent of proposed section 3809.800(a) of the February proposal is to have both the operator and affected third parties appeal directly to IBLA. The sentence about the BLM state director review and the reference in part 1840 is confusing and does not clearly state when the BLM state director would or would not review an appeal. Therefore, BLM should remove the last sentence about the BLM state director review because all appeals are going to be sent to IBLA.

Response: BLM attempted to clarify its intent in the October 1999 supplemental proposed rule. The confusing sentence has been removed. The proposed final regulations give operators and adversely affected third parties the choice of seeking state director review or appealing to IBLA and clarify when appeals may be made.

16.03 **Comment:** Commenters stated that BLM should carefully weigh the impacts of more appeals on the agency and its resources. A number of comments focused on the increased workload and delays that would be caused by the appeals process of proposed section 3809.800. Commenters stated that the detailed new permitting requirements in the 3809 proposal will greatly increase the number of BLM decision that ultimately will be subject to administrative appeals to the Interior Board of Land Appeals (IBLA), as well as increase the potential grounds for such appeals. Commenters asserted that an appeal to the IBLA is relatively simple and inexpensive for opponents of a mining project because opponents can simply repackage their NEPA comments as a statement of reasons and obtain an administrative rehearing on all of their claims, regardless of whether they have merit. But the burden of an appeal on BLM is substantial. Regulations require that the

agency assemble and transmit the entire administrative record to IBLA and that the agency must respond to an appellant's statement of reasons. Responding to an appeal can require a large amount of time from field office people, time that is lost from permit processing, compliance inspections or enforcement, or other duties. Commenters stated that BLM cannot ignore an appeal because, if BLM does not respond adequately, the decision will likely be remanded, imposing another burden on the agency and its employees. BLM's draft EIS acknowledges that the "current backlog in IBLA for a routine appeal is about 3 years." Commenters asserted that adoption of the proposed rules will increase the backlog beyond already intolerable levels. The commenter concluded that protracted administrative appeals and litigation over permitting decisions compound the delays and uncertainties in the permitting process.

Commenters also asserted that vague regulatory standards governing BLM's discretionary judgments will make the appeals that are filed more complex. Exercise of agency judgment and discretion will ultimately be judged by the standards written into the regulations. Such standards include determinations of MATP, the application of the performance standards, the completeness of Plans of Operations, adequacy of reclamation plans, the amount of bonds, and innumerable enforcement decisions (including the decision whether to allow a member of the public to accompany a BLM inspector). BLM's intent about the way particular provisions should be implemented will be meaningless if that intent is not clearly stated in the regulatory language. Because many of the provisions in the proposed rule, particularly the performance standards, are written in absolute terms, the potential for legal challenges is a source of great concern to the industry and should be of great concern to BLM.

Response: Although BLM agrees that appeals to the IBLA of BLM decisions under subpart 3809 use BLM resources, BLM concludes that such appeals are needed to provide basic procedural fairness to parties that may be aggrieved by the decision. Under the previous rules parties could appeal to IBLA (although operators were required to go through the state director review process before appealing to IBLA). As noted, many commenters objected not to the appeal process as much as to the revised rules leading to the underlying decisions that are appealed from. The potential consequences of an increased number and greater complexity of appeals, however, does not dissuade BLM from issuing needed standards and procedures.

16.04 **Comment:** Allowing operators to appeal both a noncompliance order and a later suspension order would be time consuming and costly to both the BLM and IBLA. Moreover, BLM proposes that it may eliminate certain appeals to the state director, which will further increase appeals to IBLA.

Response: We recognize that each enforcement action may have separate appeals, but it may not be necessary to relitigate issues that the same parties have already litigated. Persons who previously requested state director review can do so under the proposed final

regulations, and the state director review process has been opened to any aggrieved person. To the extent issues are resolved before the state director, appeals may not have to be taken to the IBLA.

16.05 **Comment:** BLM should revise proposed section 3809.800(b) to require the decision to state the appropriate next level of appeal. Appeals from local decisions should go directly to the state director as a time saving mechanism. The appeals process would be further streamlined if the next level above the state director is the Secretary of the Interior.

Response: The process BLM adopts in these final rules allows a party to seek review by the state director (to save time or for some other reason) or to appeal directly to the IBLA. Ordinarily, appeal rights are specified in BLM decisions. The Interior Department's Office of Hearings and Appeals (OHA) is the Secretary's representative for handling appeals from BLM decisions. OHA decisions are ordinarily final decisions of the Department, which can be appealed to an appropriate court.

16.06 **Comment:** We suggest a streamlined appeals process under which an appeal from a field-level operation can be reviewed only in a timely manner (suggesting 7 calendar days for each of the two reviews) by the office manager and state director responsible for public land management in the area of the proposed mine. Under this suggested procedure, appeals would immediately be taken to federal court as litigation. This modification would be similar to an existing U.S. Forest Service appeals process. Because the Secretary of the Interior is the ultimate policy setter for IBLA and the Solicitor and has ultimate hiring/firing authority over the Assistant Secretary, BLM Director, and the BLM state directors, the proposed appeals would be futile. This major modification would be a step toward effectively implementing NRC report Recommendations 15 and 16.

Response: One level of review within the state should be sufficient, and BLM doubts that 7 days for each review would allow enough time for meaningful review. From its experience BLM disagrees that appeals to the IBLA are futile. IBLA assures that there will be national consistency in interpreting and implementing BLM rules and does not always support local BLM decisions as the commenter asserts. BLM also disagrees that the commenter's suggestions would be an effective step in implementing the NRC report recommendations.

16.07 **Comment:** Because the NRC report did not recommend that previous appeals procedures be changed and BLM is limited to issuing rules that are consistent with the NRC report's recommendations, BLM is not authorized to modify the current appeals provisions in the previous 3809 regulations. BLM should retain the existing regulations, which allow operators to appeal to the BLM state director in certain circumstances, but direct other appeals to the IBLA.

Response: The legislative standard is that the BLM final rule not be inconsistent with the

NRC report recommendations. Report Recommendation 6 states that BLM administrative penalties should be subject to appropriate due process. The BLM appeals procedures and state director review procedures are intended to assure that BLM enforcement decisions, as well as its other decisions, are subject to due process of law. Thus the appeals rules are clearly not inconsistent with the NRC report's recommendations.

16.08 **Comment:** The proposed rule contains no mechanism (nor did its cross-referenced citations) to provide for public notice of the submittal of a Plan of Operations or Notice under the proposed regulations. Without notice, how is a person who may be adversely affected aware of the Plan of Operations or Notice activity? A public notice procedure should be established for concerned persons, adjoining property owners, and the public at large for the submittal of Plans of Operations or Notices so that these people can participate in the process.

Response: Section 3809.411(c) has been modified to establish a public participation provision for all Plans of Operations.

16.09 **Comment:** Some commenters supported having appeals taken to BLM state directors. Some stated that they favored state director review as a way to save time on appeal. Others favored the development of an appeals process that involves and emphasizes the input of local and state managers. Others objected to state director review.

Response: We agree that it is useful to have a process whereby the appeals can be resolved in a timely manner in the state where the decision was made.

16.10 **Comment:** The proposed regulations will allow each BLM state director to grant a stay on a positive record of decision for a mining operation. This power is currently reserved to the Interior Board of Land Appeals, consisting of a group of judges. Allowing a decision to grant a stay to be made by one person is contrary to the intent of Congress.

Response: The commenter is correct that under the proposed final regulations the BLM state director may stay a BLM field office or other decision that approves a Plan of Operations. The commenter is not correct, however, in asserting that this is a new feature. Existing section 3809.4(b) provides that a request for a stay can accompany an appeal to the state director.

INFORMATION COLLECTION

17.01 **Comment:** 3809.115 Information Collection. I recommend that this section be clarified, and the rationale for its inclusion with the 3809 regulations be stated. Also, is "reporting burden" the amount of time to process a Plan or Notice, or some combination of various administrative functions?

Response: We will state the rationale for including this section in the preamble of the final rule. We are required to include this section in the regulations by the Paperwork Reduction Act (PRA). "Burden" is defined in 5 CFR 1320.3, which are OMB's regulations that carry out the PRA. In part, "burden" is defined as the total time, effort, or financial resources expended to generate, maintain, retain, or disclose or provide information to or for a federal agency.

17.02 **Comment:** In Newmont's experience, Plans of Operations under the existing regulations take exponentially more time to prepare than 32 hours. Mining operations typically disturb hundreds of acres of land, and developing a Plan of Operations (including a reclamation plan) requires detailed study, sampling, testing, assessment, and evaluation by a multitude of professionals. Developing a plan and reducing it to paper consequently takes thousands of man hours.

To complete each of those five medium-sized Plans of Operations, Newmont had to dedicate an average of 2,748 man hours–a figure that utterly dwarfs BLM's 32-hour estimate. Newmont's information burden would, of course, increase for larger scale projects.

BLM could not justify a 32-hour burden estimate for preparing Plans of Operation by simply averaging the amount of time it would take all "mom and pop" mining operations to complete such plans–even assuming the "average" would be that low, which we doubt. According to BLM's own Draft Environmental Impact Statement prepared for its proposal to revise the 3809 program, in 1996, the largest 23 gold mines produced 83% , and the largest 75 mines produced 98%, of all domestically produced gold in 1996 (BLM draft EIS, page 199). For copper, 17 mines accounted for 98% of all domestic copper production (page 203). As such, a burden estimate based on ALL Plans of Operations, rather than on the burdens to operators that produce all but a small amount of the minerals on public lands, would drastically underestimate the true burden of BLM's information collection requirements.

The 32-hour figure is thus unsupportable under the current regulations. It is all the more unreasonable because BLM's proposal would require regulated entities to submit much more information than is now required.

The proposed regulations would entail considerably larger information burdens than those

imposed by the existing regulations. Yet in its proposal and supporting documents, BLM estimates that the time needed to assemble and submit a Plan of Operations is 32 hours per submission.

BLM has not complied with those standards. To the contrary, BLM's burden estimate of 32 hours to prepare and submit a Plan of Operations is wholly unsupported. First, in violation of the PRA and OMB's regulations, BLM did not develop objectively supported burden estimates. BLM's "Supporting Statement for Surface Management Activities Under the General Mining Law" attached to its PRA certification simply assumes (page 7) that"(t)he time needed to assemble and submit a Plan of Operations is 32 hours per submission." But BLM neither discusses nor defends the methodology it used to arrive at that 32-hour figure, thereby denying regulated entities a meaningful opportunity to comment on its estimates.

BLM is seeking comment on its methodologies and assumptions in compliance with P.1320.8(d)(1)(ii). See 64 Fed. Reg. at 6450. But as we explain below, BLM has never described the methodologies it used to arrive at its key assumptions. BLM itself appears uncertain as to the burden. Compare 64 Fed. Reg. at 6450 (estimating 32 hours per plan of operations) with id. at 6455 (80 hours per plan of operations).

Response: In accord with the Paperwork Reduction Act and the Office of Management and Budget's instructions for estimating paperwork burden, we are estimating only the increment of paperwork burden imposed by the proposed final regulations over and above the paperwork burden imposed by the existing regulations. We also correctly didn't include in our estimate any paperwork requirements in the proposed final rule that would merely duplicate paperwork requirements imposed by other agencies, either federal or state. If an operator has to give certain information to a state agency, the burden of also supplying that same information to BLM is relatively small. (Indeed, many of the same commenters who assert that BLM underestimated the paperwork burden also note that much of the proposed rule duplicates existing state requirements.) A revised paperwork burden estimate will be provided with the Preamble and final rules.

17.03 **Comment:** The Paperwork Reduction Act requires an agency's proposed collection of information to include an estimate of the total annual reporting and record keeping burden that will result from the collection of information. 5 CFR 1320.5(a)(iv)(B)(5); 1320.8(a)(4). "Burden" is defined to mean the "total time, effort or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency," and includes, among other things, the time and cost of "Reviewing instructions;...(and) adjusting the existing ways to comply with any previously applicable instructions and requirements." 5 CFR 1320.3(b)(1).

BLM estimates that each respondent filing a new Notice would spend about 16 hours per submission and that the time needed to assemble and submit a Plan of Operations is 32

hours per submission. BLM PRA Submission at p. 7; 64 Fed. Reg. at 6450. BLM actually presents conflicting estimates in its *Federal Register* notice. The preamble sets forth 16 and 32 hour estimates, but the text of the regulation estimates the paperwork burden at 8 hours per Notice and 80 hours per Plan of Operations. Proposed 43 CFR 3809.115(b). These conflicting estimates are confusing and will hamper the public's ability to comment on the information collection requirements. But all of BLM's burden estimates are incorrect and significantly underestimate the actual burden that will be imposed.

Response: We inadvertently included different paperwork burden estimates in two places in the proposed rule. This could have caused confusion or misunderstanding among the public. Because of this possible misunderstanding, we are reexamining the information collection burden that would be imposed by this subpart.

17.04 **Comment:** To obtain OMB's approval for collecting information, the agency must demonstrate that the information to be collected "has practical utility." 5 CFR 1320.5(d)(l)(iii). In this context, OMB has defined "practical utility" to mean "the actual, not merely the theoretical or potential, usefulness of information to or for an agency, taking into account its accuracy, validity, adequacy, and reliability, and the agency's ability to process the information it collects...in a useful and timely fashion..." 43 CFR 1320.3(1). Much of the new information proposed to be required by BLM to be submitted with a proposed Plan of Operations, (see proposed 43 CFR 3809.401) lacks practical utility.

The essence of the problem is that BLM's proposed regulations require that an operator deliver a complete Plan of Operations as a finished product before BLM will begin its review of the proposal. Proposed 43 CFR 3809.411(a). The proposed regulation ignores the fact (and BLM's current practice) that the review of a Plan of Operations is an iterative process. Key elements of the Plan may change as the environmental review by BLM and other agencies proceeds. In fact, where analysis under the National Environmental Policy Act (NEPA) is required, BLM must identify and review reasonable alternatives to the Plan of Operations initially proposed by the operator. Thus, detailed information on certain elements of the Plan of Operations is not useful or necessary until significant design and permitting decisions have been finalized.

Response: The commenter has misunderstood proposed section 3809.401. The proposed rule would not have required "a complete Plan of Operations as a finished product." We recognize that our review of a proposed Plan of Operations is an iterative process and that certain aspects of a proposed Plan are preliminary until the NEPA process is completed or even until work has begun on the site. The complete plan referenced in regulations is one that provides and adequate level of detail upon which to evaluate impacts and determine whether unnecessary or undue degradation would occur.

17.05 **Comment:** We estimate that, in connection with the five Plans of Operations Newmont submitted within the past 5 years, had the proposed rules been in effect, the time to collect

and submit the data required would have increased roughly two to three fold.

The additional information requirements BLM's proposed rule would impose would increase Newmont's burden for medium-sized projects by 3,878 more hours. The total personnel burden for medium-sized projects under BLM's proposed rule would thus be a whopping 6,626 hours to complete BLM's information collection and submission requirements.

We respectfully request that OMB disapprove BLM's proposed information collection for Plans of Operations on the grounds that it has no practical utility under the circumstances. At the very least, we urge OMB to comment on BLM's proposal suggesting that the agency not require operators to submit Plans that necessarily will be revised during and after the NEPA process.

Response: In accord with the Paperwork Reduction Act and the Office of Management and Budget's instructions for estimating paperwork burden, we are estimating only the increment of paperwork burden imposed by the proposed regulations exceeding the paperwork burden imposed by the existing regulations. We also correctly didn't include in our estimate any paperwork requirements in the proposed rule that would merely duplicate paperwork requirements imposed by other agencies, either federal or state. If an operator has to give certain information to a state agency, the burden of also supplying that same information to BLM is relatively small. (Indeed, many of the same commenters who assert that BLM underestimated the paperwork burden also note that much of the proposed rule duplicates existing state requirements.) Because of this possible misunderstanding, we are reexamining the information collection burden that would be imposed by this subpart.

17.06 **Comment:** We also cannot help but wonder whether BLM truly appreciates the burden that this new 3809 proposal would impose on the private sector. Apparently BLM has little comprehension of how much regulatory burden already is placed on the private sector from the current 3809 rules. Under the Paperwork Reduction Act, BLM was obligated to assess the information collection requirements of this new proposal. Incredibly, BLM estimated that the average burden for information collections on the private sector created by the proposed rule would be "32 hours per Plan of Operations." 64 Fed.Reg. at 6450. . This information collection burden would include matters such as collecting baseline environmental data for water, the terrestrial environment, and air; developing a plan of operations; assessing potential impacts; and developing reclamation plans.

The Interior Department's estimate purports to cover the entire information collection burden of processing a BLM Plan of Operations under the proposed rule, not merely the increased incremental burden of the proposed rule as compared to the existing rules. We find BLM's estimate of the information collection burden to be incredibly low and so far

off the mark that it questions the very integrity of the Paperwork Reduction Act submission made by the Interior Department to the Office of Management and Budget (OMB) as well as the economic analyses and assumptions for with the Interior Department's entire proposed rulemaking.

The time to process a BLM Plan of Operations today is closer to 2,600-3,000 hours and ranging up to 16,000 hours or more. And, we believe that the proposed rule likely will increase that burden by at least 25-50% in the case of mineral exploration projects, and substantially in excess of that range for actual mining projects, probably by as much as 50-100%. These estimates are supported by descriptions of recent case studies (previously submitted by us to OMB and to the BLM docket) involving modest-sized mineral exploration and mining Plans of Operations processed by BLM.

Response: In accord with the Paperwork Reduction Act and the Office of Management and Budget's instructions for estimating paperwork burden, we are estimating only the increment of paperwork burden imposed by the proposed regulations exceeding the paperwork burden imposed by the existing regulations. We also correctly didn't include in our estimate any paperwork requirements in the proposed rule that would merely duplicate paperwork requirements imposed by other agencies, either federal or state. If an operator has to give certain information to a state agency, the burden of also supplying that same information to BLM is relatively small. (Indeed, many of the same commenters who assert that BLM underestimated the paperwork burden also note that much of the proposed rule duplicates existing state requirements.) Because of this possible misunderstanding, we are reexamining the information collection burden that would be imposed by this subpart.

17.07 **Comment:** Barrick has knowledge and experience of the requirements needed to submit both Notices and Plans of Operations, and it has estimated the increased burden that BLM's proposed regulations will impose. Even the simplest proposed Plan of Operations requires contributions from and reviews by an army of experts and professionals, including geologists, mining engineers, environmental engineers, civil engineers, hydrologists, wildlife biologists, and metallurgists. Preparing and submitting a relatively simple Plan of Operations to meet BLM requirements is likely to require thousands of hours, not a just few days or weeks. For example, OMB's regulations require that the burden estimate include the time and effort "reviewing instructions." If the proposed regulations are finalized, each operator will be required to spend substantially more than 32 (or 80) hours reviewing the final rules and the preamble to the final rules, determining the differences with existing rules and requirements, reviewing BLM instructions and/or guidances, and determining the changes that will need to be made in future submittals. Similarly, just one of the new–and unnecessary–requirements, the preparation of a monitoring or mitigation plan in the initial stages of permitting, will require substantially more than the total time estimated by BLM.

BLM's estimate of the information collection burden has no basis in reality. OMB's regulations require the agency to provide "an objectively supported estimate" of the burden, 5 CFR 1320.8(a)(4), and to solicit comment on the "validity of the methodology and assumptions used" to estimate the burden, 1320.8(d)(1)(ii). Yet neither the *Federal Register* notice nor BLM's submission to OMB contain any objective support for the estimate or identify any methodologies or assumptions used. BLM simply "estimates" the time required, and the agency's estimate is wrong.

Response: In accord with the Paperwork Reduction Act and the OMB's instructions for estimating paperwork burden, we are estimating only the increment of paperwork burden imposed by the proposed regulations exceeding the paperwork burden imposed by the existing regulations. We also correctly didn't include in our estimate any paperwork requirements in the proposed rule that would merely duplicate paperwork requirements imposed by other agencies, either federal or state. If an operator has to give certain information to a state agency, the burden of also supplying that same information to BLM is relatively small. (Indeed, many of the same commenters who assert that BLM underestimated the paperwork burden also note that much of the proposed rule duplicates existing state requirements.) Because of this possible misunderstanding, we are re-examining the information collection burden that would be imposed by this subpart.

17.08 **Comment:** Permitting delays will also occur because BLM is greatly increasing its responsibilities and the information that it will require from operators to submit, without any increase in BLM field staff. It's my opinion that BLM does not have staff or the expertise to implement the proposed regulations.

Response: We developed this proposed rule in consultation with state offices and field staff. We have taken into account all workload considerations.

17.09 **Comment:** BLM estimated that it will take 32 hours to assemble and complete the needed information to prepare a Plan of Operations. This is preposterous. It takes literally thousands of hours to accomplish this task. The proposed changes in the 3809 rules will make compiling and completing a Plan of Operations significantly longer than the time it now takes to prepare a plan.

Response: In accord with the Paperwork Reduction Act and the Office of Management and Budget's instructions for estimating paperwork burden, we are estimating only the increment of paperwork burden imposed by the proposed regulations exceeding the paperwork burden imposed by the existing regulations. We also correctly didn't include in our estimate any paperwork requirements contained in the proposed rule that would merely duplicate paperwork requirements imposed by other agencies, either federal or state. If an operator has to give certain information to a state agency, the burden of also supplying that same information to BLM is relatively small. (Indeed, many of the same commenters who assert that BLM underestimated the paperwork burden also note that

much of the proposed rule duplicates existing State requirements.) Because of this possible misunderstanding, we are reexamining the information collection burden that would be imposed by this subpart.

17.10 **Comment:** Delete .115 in its entirety. It has nothing to do with a mining operation on public lands. If the Department of the Interior deems that formal approval of OMB is necessary in the regulations, then it should be incorporated in the definition of a completed application. Similarly, if the Department of the Interior deems it necessary to include the estimated 80 hours of BLM time to review an application, then the federal cost of what 80 hours and the applicant's time and financial costs to provide the application to BLM should also be added. For example, the $30,525,000 annually for conversion of 370 Notice-level mining operations to Plan-level operations under the proposed 3809 regulations. The cost of increased inspection and other BLM costs not included in the 20% increase in BLM review time cost should also be revealed here.

Response: This section gives the public information about the information burden of the subpart as well as about how to submit comments on the information collection requirements of the subpart. We included proposed section 3809.115 because we are required to do so by the Paperwork Reduction Act whenever a regulation asks the public for information. See 5 CFR 1320.3(f)(3) and 1320.5(b)(2)(ii)(C).

IMPLEMENTATION COSTS OF ALTERNATIVES

18.01 **Comment:** The Department of the Interior (December 22, 1998, page 50) predicts that annually the proposed regulations will cause 370 Notice-level operations under the existing 3809 regulations to require Plan-level detail. The estimated increase cost to each Notice-level converted to a Plan-level application is $82,500 each (page 49), while BLM review costs will increase by $1,570 for each (page 51). The projected annual increase of $30,525,000 for application information under the proposed 3809 regulations for Notice-to Plan-level conversion to the owners/operators and a $580,900 increase in the cost for BLM application review. This is an average annual minimum cost increase of from about $35,030 to $56,045 per acre and is totally unsupported by a potential of less than 10 acres of public lands annually having unresolved unnecessary or undue degradation under the existing Notice-level requirements. There also is projected to be a total annual increase in the administrative costs for BLM to review new or revised procedures, which are arbitrary and capricious.

Response: Under the No Action Alternative BLM would review about 150 Plans of Operations each year. We estimate there will be 260 to 300 fewer Notices and an additional 140 to 180 Plans of Operations under Alternative 3. This change will increase operator costs by $11 to $15 million and BLM costs by $3.5 million annually. The land potentially affected by operators causing unnecessary or undue degradation is considerably greater than 10 acres. A 1999 survey of BLM field offices reported 530 operations where the operator had abandoned the property and BLM would have to perform the reclamation to prevent unnecessary or undue degradation. Most of these were Notice-level operations. This was only a partial survey because many offices did not respond. Assuming that each Notice-level operation disturbs an average of 2 acres, this is a direct impact to more than 1,000 acres. Many impacts extend beyond the area of direct disturbance, potentially degrading water, air, wildlife, and visual resources outside the project area. In addition, the environmental benefits of Plan preparation and review are not limited to situations where notices of noncompliance are issued or where operators abandon sites. Often better planning can result in reducing or avoiding the impact before they occur. For example, consideration of alternative locations for placement of waste rock may reduce or avoid impacts to groundwater. Estimating the environmental benefits and assigning a monetary value is not practical, especially not for a programmatic analysis.

18.02 **Comment:** BLM has stated that it will not have to increase its staff to implement Alternative 3. Elsewhere BLM states that implementation will cost 25 to 35% more than at present. Where would the money come from? It would take three or four times as many BLM people to implement the regulations at the very least. BLM's draft EIS should consider as an alternative the reasonable possibility that the proposed rules may be adopted, and that the necessary increased funding levels may not materialize. The EIS also doesn't say how passage of Alternatives 3 or 4 would be paid for. How are the proposed regulations going to be implemented if adequate funding is not obtained? We wonder

where you're going to get those resources. Mining industry representatives in the scoping process also raised this alternative, yet BLM did not consider it.

Response: To analyze the regulations on their merit, the impact assessment must assume that the regulations would be fully implemented in each alternative. The ability to obtain the needed funding for the program is an implementation concern that the decision makers will have to consider when selecting a final regulation alternative. Funding requests are provided to the administration and consolidated for submission to Congress. Should BLM not obtain funding to implement the selected alternative, the BLM manager has several options. Internal priorities between programs can be adjusted to shift funding or staffing, personnel can be loaned between offices, workload schedules can be adjusted to address higher priority 3809 Plans, and project reviews could be delayed. The final EIS discusses BLM's expected funding and staffing needs under each alternative.

18.03 **Comment:** Nowhere in the EIS is there an estimate of the actual COSTS involved with totally rewriting the 3809 regs. Just in paper alone it will have to run into the millions of dollars. Add to the actual costs of printing new regs, the costs of destroying the old ones, mailing the new ones, educating everyone involved.

Response: We don't have the actual costs of drafting the 3809 regulations. Employees performed most of the work in their current duties. Most of the costs were for travel for public meetings or consultation with the states. BLM conducted these activities under the BLM's operating budget without special supplemental funding.

18.04 **Comment:** This rulemaking will inevitably cause delays in implementing new mining activity and reclaiming mines nearing the end of the business cycle. But these delays are not necessary, given existing state regulatory programs that are satisfactorily dealing with these issues.

Response: The potential exists for delays under any of the alternatives. But we do not believe that the proposed final regulations would significantly delay mine permitting or closures. There are gaps in the current regulatory system as shown by the NRC Report. The proposed final regulations would address these gaps in a comprehensive manner which may actually expedite mine review.

18.05 **Comment:** BLM admits to having received no promise of increased manpower or funding or having been earmarked for such support for enforcing the 3809 rules. Am I to understand that each time someone wishes to operate a dredge with an intake larger than 4 inches that he or she must contact the local BLM office? Quite the undertaking for an agency that claims to be over worked, under staffed, under budgeted, and lacking in enforcement capability.

Response: Overall agency funding is determined on a year-to-year basis as part of the

congressional budget process. BLM does not typically receive promises on future funding levels but has to submit budget requests through the Administration to Congress. The final regulations on suction dredging have been revised. Operators would not have to contact BLM if there were a federal-state agreement on regulating suction dredging.

18.06 **Comment:** The draft EIS does not address the potential costs to states of having to revise all or portions of their regulatory programs to obtain authority to run those programs in lieu of the BLM performance standards. It is, we submit, reasonably foreseeable that at least some states will seek to revise their programs and that those states will incur significant costs in the process. Therefore, the regulatory costs to states of the Proposed Action and alternatives must be addressed in the draft EIS.

Response: The proposed 3809 regulations do not require the states to revise their regulatory programs. The states can continue to work with BLM under a joint federal-state program as provided for in 3809.200(a). The state can accept responsibility for an aspect of the program under 3809.200(b). If that is the case and the state regulations do not provide equivalent protection for that portion of the program over which they want to assume control, then the state can change its regulations or continue to work with BLM under 3809.200(a) agreements. Any significant costs to the states would be incurred voluntarily.

18.07 **Comment:** States are reluctant to take over a program with no money. And that's the way BLM will assure that a state will never take over a program.

Response: BLM has no authority to give states money to implement the program. The reluctance to take on more responsibilities without specific funding is understandable. That is why the regulations provide for the option of continuing to have joint federal-state programs under 3809.200(a). Both types of agreements are possible for different aspects of the regulations.

18.08 **Comment:** I have heard estimates that a 35% increase in BLM's budget would be required to monitor and enforce these new rules. The cost of implementing this proposal will exceed $300 million. I suspect that a bureaucratic estimate of 35% would, true to bureaucratic standards, quickly be overrun by the actual cost of implementation. How can you possibly ask anybody to spend $300 million when we don't even know why we are here in the first place. I think that adequate rules exist and if this increased funding were applied to the appropriate agencies, it would provide for improved environmental protection without stifling the mining industry.

Response: The estimated budget increase was for BLM's 3809 program, not for BLM's entire budget. This estimate has been revised in the final EIS.

18.09 **Comment:** The cost of regulations that the government agencies say have no or very

little cost, this is really not true. The cost of government regulation is great. I am convinced that the cost of adopting the Alternative 3 revisions would significantly exceed that estimated in the draft EIS. The draft EIS grossly underestimates the costs of implementing the regulations.

Response: BLM has revised the cost estimates in the final EIS.

18.10 **Comment:** Page 46, Implementation. The draft EIS estimates that BLM's costs of implementing the Proposed Action would increase by 25 to 35%. The draft EIS does not state the current costs of implementing the surface management program or discuss why costs would increase by this amount. It is completely inadequate to state in the draft EIS that "it is difficult to predict the implementation costs for BLM to administer the proposed regulations..." BLM must comprehensively describe the alternatives. This description must include estimates of the added staff and other costs required to implement this alternative. It must also include a comparison of the costs to implement this alternative versus the costs of implementing the No Action Alternative and Alternative 2, State Management. A table should be prepared to show the cost of implementing the alternatives. The alternatives cannot be objectively considered without this comparison. The statement in the draft EIS that "costs would increase by 25 to 30%" has no supporting documentation. BLM needs to provide the bases for this conclusion. The EIS should estimate how the projected higher costs would be reduced if the program were passed through to states, as well as what the program would cost states compared to what they pay now.

Response: BLM has revised the final EIS to present a more complete analysis of predicted implementation costs. But the main purpose of an EIS is to analyze and compare the environmental impacts of the proposed 3809 regulations under alternative regulatory programs.

18.11 **Comment:** The EIS's assessment of economic impacts is distorted. The EIS should consider the economic impacts on BLM operations, which were not considered but which many earlier commenters urged to be considered. The lack of such a discussion further adds to the flaw in the economic analysis.

Response: The economic analysis and implementation costs have been revised in the final EIS.

18.12 **Comment:** The new regulations would cause a need for increased staffing, which I as a taxpayer cannot afford. It will cost BLM quite a bit of money to attain the level of expertise on staff that the states now have.

Response: BLM already has considerable staff expertise in geology, geochemistry, mining engineering, soils, reclamation, and mine economic analysis. Costs for increased

staff and training are included in the implementation estimate. For the proposed final regulations, BLM intends to continue to rely on state expertise in the federal-state agreements provided for under 3809.200.

18.13 **Comment:** Hundreds of pages of new regulations will have to be promulgated to thousands of people. The time and money required to do this will be significant for both BLM and the miners. There will be confusion, bitter feelings, and law suits. Chaos and confusion will reign for some time. The distressing part of all this is that even if you make the changes, explain them successfully, and get good cooperation, I believe there will be no true gain. The water, air, and land will not be cleaner or less affected than they are under the current rules.

Response: The final regulations will probably be less than 50 pages and will be accessible to anyone through the *Federal Register* either as a paper copy or on the Internet. BLM people in local offices will help operators understand the requirements of the final regulations.

18.14 **Comment:** 3809.11-- Please define "reasonably incident to mining." This section increases the reporting requirements for mineral exploration and mining. Does BLM have the extra staff to review the Notices? How much will it cost to implement this reporting section?

Response: "Reasonably incident to mining" is defined in the occupancy regulations at 43 CFR 3715. Those regulations implement the requirements of Public Law 167 (1955) that use or occupancy on a mining claim may only be for purposes that are reasonably incident to prospecting, mining, or processing operations. The cross reference in the 3809 regulations is to remind operators of their obligations under the 3715 regulations but does not represent any increase over existing requirements.

18.15 **Comment:** Adopting the proposed rules will greatly increase the administrative burden on BLM, as well as the regulatory burden on the private sector. For example, BLM will have to process vast new amounts of information supplied by the private sector.

Response: Increases in BLM's administrative burden are described in the final EIS. BLM does see an increase in administrative burden to operators from the proposed final regulations. This increase is shown in the tables in Appendix E of the final EIS. The amount of information that the private sector will have to provide and BLM will have to process under the Proposed Action should not vastly differ from that under the existing regulations. The proposed final regulations codify the current practices being followed by most field offices and operators.

18.16 **Comment:** New administrative enforcement tools will be provided to BLM, and we must expect that BLM will use them. The detailed new requirements in the 3809 proposal will

greatly increase the number of BLM decisions that will ultimately be subject to administrative appeals to the Interior Board of Land appeals (IBLA). The grounds for such appeals also will be markedly expanded. BLM's draft EIS acknowledges that the "current backlog in IBLA for a routine appeal is about 3 years." Adoption of the proposed rules, however, will increase that backlog to levels, which while currently unpredictable, will certainly be much longer than what is already a currently intolerable appeal backlog.

Response: The appeal backlog at IBLA is determined by the workload generated from appeals of many Department of the Interior programs and agencies, not just the BLM's 3809 regulations. Appeals generated by the 3809 program are not believed to represent a significant portion of the backlog. The proposed final regulations add a process for third-party appeals (appeals from other than the operator) to go for state director review. This process may provide a way to decrease the number of appeals that go to IBLA from third parties.

18.17 **Comment:** The proposed rules will increase the number of Plans of Operations that BLM must process, not to mention the level of scrutiny BLM must give activities subject to these proposed plans. For example, BLM's presumption that backfilling is feasible will greatly increase the scrutiny of that issue and place new burdens on BLM to justify deviation from that presumption (not to mention defending Plans of Operation that do not require backfilling through the Interior Board of Land Appeals administrative appeal process).

Response: BLM agrees that the final regulations would increase the number of Plans of Operations. BLM has revised the final regulations to remove the presumption of pit backfilling.

18.18 **Comment:** The BLM administrative costs for regulatory oversight of the proposed 3809 regulations would increase by 25-33% for Alternative 3 (page 46) and double (about 200%) under Alternative 4 (page 50). Coupled with a projected decrease of 5% and 30% respectively in mining under the two alternatives, revenues from fees imposed on mining would decrease proportionately. Fees could be increased significantly to meet the increased administrative costs. Also, the administrative penalties described under 3809.700 may be driven more by the need for revenues than for environmental protection.

Response: Congress, not BLM, sets mining claim fee amounts. Any monies derived from fees would not go for BLM use.

18.19 **Comment:** BLM has advised the state offices to assume that there will be no budget increases or additional funding for implementing the new regulations. Administering the existing 3809 rules already appears to strain BLM resources. The significant expansion in BLM responsibilities under the new regulations, whether or not the states obtain "deferral," will increase this strain, likely resulting in further delays in permitting of new

mining operations and expansion of existing operations. This strain will simply add to the unreasonable and undue burdens the new regulations will place upon the mining industry.

Response: Any more funding requests or changes in priorities cannot be considered until the regulations are in place. BLM has advised the field offices of this situation and requested input on the budget implications should the regulations be adopted. The proposed final regulations do not expand BLM's responsibilities beyond preventing unnecessary or undue degradation to public lands.

18.20 **Comment:** Alternative 2 is without merit and does not comply with NEPA requirements that alternatives be realistic unless it also assumes that the Department of the Interior would reimburse a state for assuming BLM's obligations under the existing or proposed 3809 regulations. The draft EIS is flawed in not considering and evaluating the requirements of Section 4(b) of May 14, 1998 Executive Order on "Federalism" that provides: "to the extent practicable and permitted by law, no agency shall promulgate any regulation that is not required by statute, that has federalism implication, and that imposes substantial direct compliance costs on States and local governments, unless: (1) funds necessary to pay the directs costs incurred by the State or local government in complying with the regulation be provided by the Federal Government..."

Response: Alternative 2 is highly realistic. This is how mining on BLM lands was regulated before 1981, when the existing 3809 regulations went into effect. Alternative 2 would not require the states to assume any BLM obligations but would make BLM rely on the states' own self-imposed obligations as sufficient to protect the public lands from unnecessary or undue degradation. This is in direct response to many scoping comments that state programs were adequate and that the BLM regulations are duplicative of state regulations. Regarding federalism, the proposed final regulations do not impose any direct costs on the states.

18.21 **Comment:** The proposed rule puts into regulation issues that more properly belong in policies and guidance documents. It creates the possibility of duplication of effort and conflict among federal and state agencies. It unnecessarily exposes BLM and states to possible lawsuits on whether state regulations are consistent with proposed environmental standards.

Response: Past efforts to address performance standard issues such as acid rock drainage resulted in public concern that BLM was circumventing the rulemaking process with policy documents. One of the main purposes of state-federal agreements would be to eliminate duplication of effort.

18.22 **Comment:** The states believe the proposed rule will add cost to implementing the 3809 regulations but will result in little improved environmental protection. Clearly, BLM does not have the money and workers to implement the requirements outlined in the proposed

rule if it finds that a state's regulations are not consistent with the new standards or a state chooses not to enter into an agreement with BLM as outlined in the proposed rule to implement the new regulations. The result of implementing the regulations is unfunded mandates to states for implementation.

Response: The proposed final regulations would not result in any mandate to the states. The states are under no obligation to implement the regulations unless they voluntarily enter into an agreement with BLM in which they make such commitments. Even if the states enter an agreement, they could easily cancel it should they no longer wish to continue implementing the regulations.

18.23 **Comment:** BLM has utterly failed to address economics, including the huge impact to bentonite mining.

Response: Economic analysis makes up a large portion of the EIS. Bentonite mining is addressed under the industrial mineral mine category in Chapter 3 and Appendix E.

18.24 **Comment:** BLM has not given any consideration to the NRC study (NRC 1999) as evidenced by the flat budget request for Interior in the FY 2000 budget. Were BLM considering better enforcement and efficiencies, it would need more funding, which has not been requested.

Response: The budget process for the FY 2000 budget was already under way when the NRC report was released. The NRC report by itself cannot justify budget requests without developing specific implementation actions like new regulations, or increased staffing recommendations, which are just now being considered.

PERFORMANCE STANDARDS FOR OPERATIONS

19.01 **Comment:** Compliance with an approved Plan of Operations should be deemed compliance with the performance standards, and compliance with state and federal laws constitutes compliance with performance standards.

Response: To comply with an approved Plan of Operations you must comply with § 3809.420 as applicable; the terms and conditions of your approved Plan of Operations and other federal and state environmental protection laws. §3809.415 was included to clarify to operators their obligations while conducting operations on public lands.

19.02 **Comment:** The proposed performance standards fail to give a greater level of protection to the environment. They allow environmental protection to be dumbed down to whatever a company thinks is "appropriate" or thinks it can afford. Any mining operation that isn't using proven available techniques should be categorized as causing "unnecessary" degradation. Minimize is a vague, subjective term that is difficult to enforce. The new regulations should require mining companies to prevent, rather than minimize, undue environmental impacts.

Response: The environmental performance standards in §3809.420 (b) describe the outcome an operation must achieve relative to each environmental resource and incorporate a requirement for compliance with other state and federal laws. Operations are required to use equipment, devices, and practices that will meet the performance standards of §3809.420. Minimize means to reduce the adverse impact of an operation to the lowest practical level. During review of operations, BLM may determine that it is practical to avoid or eliminate particular impacts.

19.03 **Comment:** The current definition of undue or unnecessary degradation appropriately implies a site-specific environmental performance standard. Retention of this site-specific concept is critically important to ensure that environmental and reclamation measures employed at mines on BLM-administered lands respond to site environmental conditions.

Response: BLM is retaining the site-specific nature of the unnecessary or undue degradation definition through the site-specific nature of an approved Plan of Operations.

19.04 **Comment:** In light of BLM's proposal to define"minimize" as synonymous with "avoid or eliminate," the minimization requirements in 3809.420 give BLM broad discretionary authority to disapprove a Plan of Operations for failure to eliminate or prevent impacts. This constitutes a de facto unsuitability criterion in the proposed regulations. Moreover, BLM's proposed definition of minimize will create enormous ambiguities and will be impossible to administer and implement. Some impacts of ore extraction are unavoidable. Many of the minimization requirements are unachievable.
Response: In response to comments and to clarify what BLM intended, the definition of

minimized has been modified from the draft proposal. Minimize means to reduce the adverse impact of an operation to the lowest practical level. During review of operations, BLM may determine that it is practical to avoid or eliminate particular impacts. While there are times and situations where it is possible to avoid or eliminate impacts altogether, BLM recognizes some impacts of operations are unavoidable. But it is always our goal to reduce those impacts to the lowest practical level.

19.05 **Comment:** Reclamation standards are weak and insufficient for protecting natural ecosystems. Reclamation standards must explicitly require restoration to premining hydrological conditions, as well as for fish and wildlife habitat. To facilitate reclamation, operators must submit detailed, premining baseline data, and regular monitoring of environmental resources should continue during and after reclamation.

Response: There are three classes of performance standards: general, environmental, and operational. The general and environmental performance standards are mainly designed to avoid impacts that would require reclamation. Operational performance standards are somewhat general. Site-specific reclamation plans and monitoring plans are required from operators. If necessary, BLM may require operators to provide premining baseline environmental data. BLM will review the Plan of Operations and reclamation and monitoring plans to ensure they will meet the performance standards. In addition, after reclamation, all mining operations must comply with BLM's Standards for Public or Rangeland Health if those standards have been incorporated into BLM's land use plan.

19.06 **Comment:** The commenter is concerned about a long list of new environmental performance standards in the proposed rules. Many of the environmental performance standards duplicate existing state and federal programs and permitting requirements, particularly for water quality. The commenter believes that the BLM regulations should focus on mining and reclamation activities and defer performance standards for other resources to existing programs managed under the Environmental Protection Agency, U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, and State Historic Preservation Office, among others.

Response: To clarify to operators, BLM, and the public which performance standards an operator must comply with when operating on the public lands, BLM determined that more standards would help in defining and preventing unnecessary or undue degradation. BLM is the land manager responsible for ensuring that operations on land under its jurisdiction comply with federal, state, tribal, and where delegated by the state, local government environmental requirements. BLM does not take enforcement actions for violating federal, state, tribal, or appropriate local environmental requirements. But if operators are cited for such violations, BLM will notify the operators that they are in noncompliance with their Plan of Operations and give them a compliance notice. BLM thinks the performance standards in §3809.420 are outcome based. Several approaches were considered for developing standards. BLM considered developing for exploration,

mining, and reclamation design and operating requirements that specified how operations had to be designed, built, and operated. But we rejected these requirements as too inflexible and impracticable given the wide variation in conditions and circumstances in mining operations on the public lands. BLM then selected an approach to standards that looks for the outcome or accomplishment an operator must achieve. This method places a minimum emphasis on how a operator must conduct an activity as long as the desired outcome is met. This method gives operators the most flexibility to conduct operations in a cost-effective and innovative fashion.

19.07 **Comment:** Section 3809.420(5)(b)(1), Environmental Performance Standards, covers operator compliance to state and federal water quality standards. While this section in the proposed rule has been expanded to include tribal standards on Indian reservations and trust lands, the proposed rule should also clearly delineate BLM's role on these lands.

Response: To clarify to operators, BLM, and the public which performance standards an operator must comply with when operating on the public lands, we determined that more standards would help in defining and preventing unnecessary or undue degradation. BLM is the land manager responsible for ensuring that operations on land under its jurisdiction comply with federal, state, tribal, and where delegated by the state, local government environmental requirements. BLM does not take enforcement actions for violation of federal, state, tribal, or local environmental requirements. But if operators are cited for such violations, BLM may notify operators they are in noncompliance with their Plan of Operations and give them a compliance notice.

19.08 **Comment:** Performance standards should apply to all hardrock mining operations, and in some cases they may need to be prescriptive standards. Operators should be required to describe the manner in which they will achieve performance standards for the Proposed Action and a mine design that is based on current feasible engineering. We believe it is critical for the operator to state whether the mine will be a zero discharge mine based on a sound, well-documented water balance accounting. Technologies and treatments to meet water quality standards must address both human health (maximum contaminant levels–MCLs) and environmental standards (aquatic life). The use of perpetual water treatment should be considered only in cases where source control is not adequate through the life of the mine, including closure. Although improved, the performance standards in the preferred alternative still do not include a requirement for total water balance. EPA refers BLM to design standards such as those in 40 CFR Part 258 (Solid Waste Disposal Facility Criteria; Final Rule), which include both performance-based standards and prescriptive standards given the similar impacts that can result from the disposal of mining wastes and solid wastes. The final EIS should address the fact that some states exempt some hazardous mining wastes from regulation and explain how this rule ensures coverage in those cases.

Response: The performance standards in §3809.420 apply to all "hardrock" mining

operations. We rejected the prescriptive approach to developing performance standards as too inflexible and impracticable given the range of environmental conditions on public lands and the wide variety of exploration and mining activities. Instead, we focused on outcome-based standards or conditions the operator must achieve. The Plan of Operations is required to provide information for BLM to determine that unnecessary or undue degradation will not occur. Avoiding such degradation includes compliance with federal and state environmental protection laws. Water balance accounting and identification of "zero discharge" would be information included in the Plan of Operations, if necessary. BLM requires that hazardous mining waste be managed so as not to cause unnecessary or undue degradation.

19.09 **Comment:** We feel that the following suggestion will help prevent unnecessary or undue degradation of public land resources by mining operations: Requiring mining operators to meet certain outcome-based performance standards relating to all aspects of operations, including exploration, mining, processing, and reclamation.

Response: The §3809 regulations require all aspects of operations, exploration, mining, processing, and reclamation to prevent unnecessary or undue degradation through compliance with the general, environmental, and operational performance standards. These are outcome- based standards.

19.10 **Comment:** Since this 3809 review process began, Nevada has repeatedly stated that performance standards should be outcome based. In the proposed regulations, BLM has created performance standards that cannot be met. Worse yet, BLM has tied these performance standards to the definition of unnecessary or undue degradation. The current 3809 definition of unnecessary or undue degradation is quite comprehensive and relies on compliance with "applicable environmental protection statutes." Therefore, if any federal, state, or local mining regulatory requirement is not met, BLM could consider that activity as unnecessary or undue degradation. On the basis of the new definition, however, a state such as Nevada, with fully delegated air and water programs, could find itself in an endless loop of federal requirements. We could have a facility that complies with every air and water standard but has not met a performance standard and is therefore out of compliance. This is simply an unworkable situation.

Response: To clarify to operators, BLM, and the public which performance standards an operator must comply with when operating on the public lands, we determined that more standards would help in defining and preventing unnecessary or undue degradation. BLM is the land manager responsible for ensuring that operations on land under its jurisdiction comply with federal, state, tribal, and where delegated by the state, appropriate local environmental requirements. BLM does not take enforcement actions for violation of federal, state, tribal, or local environmental requirements. But if operators are sited for such violations, BLM may notify operators they are in noncompliance with their Plan of Operations and give them a compliance notice. We think the performance standards

included in §3809.420 are outcome based. We considered several approaches for developing standards, including exploration, mining, and reclamation specific design and operating requirements that specified how operations had to be designed and built. For the proposed final regulations we rejected these requirements as too inflexible and impracticable given the wide variation in conditions and circumstances in mining operations on the public lands. BLM selected an approach to standards that looks for the outcome or accomplishment an operator must achieve. This method puts a minimum emphasis on how a operator must conduct an activity as long as the desired out come is met. This provides the operator the maximum flexibility to conduct operations in a cost-effective and innovative fashion. To implement the new regulations BLM will review the Notice or Plan of Operations to determine if it is reasonably likely to meet each outcome-based performance standard but would not require any specific design to be used. Section 302(b) and 303(a) of FLPMA, 43 U.S.C. 1732(b) and 1733(a), and the Mining Law, 30 U.S.C. §22, give BLM the authority for requiring compliance with water quality requirements. Requiring operators to meet federal, state, tribal, or if delegated by the state, local water quality standards, falls squarely within the actions the Secretary of the Interior can direct to prevent unnecessary or undue degradation of the public lands. Section 303(a) directs the Secretary to issue regulations for the "management, use and protection of the public lands...." In addition, 30 U.S.C. §22 allows the location of mining claims subject to regulation. Taken together, these statutes clearly authorize the regulation of environmental impacts of mining through measures such as compliance with water quality standards. A number of performance standards are not air or water related. An operator could be complying with state air or water standards yet not be complying with revegetation or solid waste standards and therefore be in noncompliance with the Plan of Operations.

19.11 **Comment:** BLM's approval of the Plan of Operations is a "federal licence or permit" and requires a 401 Certification (or waiver of certification) from the state in order to be valid. Under the federal Administrative Procedure Act (APA) the definition of "licence" is extremely broad. The APA defines "licence" to include "permit"... or other form of permission." 5 U.S.C. 551 (8). Thus, that a mining company may also be required to get other federal permits (e.g., Section 404 permits from the Army Corps of Engineers), does not negate the fact that the BLM Plan of Operations approval is a separate "licence or permit" subject to section 401. As long as a discharge is anticipated by the Plan, a Section 401 Certification is required. At most hardrock mines, some point source discharge is likely. For example, discharges from sedimentation ponds, mine pits, ponds, dumps, and other workings are considered point source discharges under the Clean Water Act. Before approval of any Plan of Operations under Part 3809, BLM must receive a certification from the project applicant that the project will comply with all water quality requirements. Such a requirement is mandatory under Section 401 of the Federal Clean Water Act. Under current practice BLM rarely requires such a certification, instead relying on a simple assurance from the operator that the project will comply with water quality standards. Under Section 401, the formal certification from the state is required.

The Plan cannot be approved until the state has issued or waived the certification.

Response: BLM agrees with the comment, but does not need to amend subpart 3809 to comply with Section 401 of the Clean Water Act. BLM will not approve Plans of Operations under subpart 3809 until any needed certification has been obtained by the operator or waived under Section 401 of the Clean Water Act. Clean Water Act Section 401 Certification will be required for any Plan of Operations where discharges into navigable waters are expected. BLM does not consider this a new requirement because subpart 3715 already makes uses and occupancies under the Mining Law subject to all necessary advance authorizations under the Clean Water Act. See 43 CFR 3715.3-1(b) and 3715.5(b) and (c). If the state, interstate agency, or EPA, as the case may be, fails or refuses to act on a request, the certification requirements will be considered waived. In such circumstances, BLM will follow EPA rules at 40 CFR 121.6(b) and notify the appropriate EPA regional administrator that there has been a failure of the state to act on the request for certification within a reasonable period of time after receipt of such a request.

19.12 **Comment:** Preconceived and specific reclamation components should not be included in the regulatory definition and should be left up to a Plan of Operations that will certainly go beyond generic descriptions. Reclamation standards and objectives are clearly spelled out on a site-specific basis in a BLM Plan of Operations and/or state required reclamation plans. Therefore, BLM should not propose a list of generic reclamation components in the 3809 regulations.

Response: Elements of reclamation were included in the definition for illustrative purposes. As the definition explains, not every element will be required for each operation. Plans of Operations will specify on a site-specific basis how the operator is to comply with subpart 3809. A reclamation plan will have to be submitted as a portion of the Plan of Operations that addresses specifically how these standards will be achieved.

19.13 **Comment:** We are opposed to the proposed 3809 changes for the following reasons: The vague performance standards would be impossible to interpret and meet.

Response: The performance standards in §3809.420 were included to clarify to operators which performance standards an operator must comply with when operating on the public lands. Local BLM offices will help operators understand the performance standards and the information required in a Plan of Operations to demonstrate that the proposed operation would not result in unnecessary or undue degradation.

19.14 **Comment:** The goal of compensatory restoration is to compensate for the interim loss of natural resources and/or services that occurs from the date of the onset of the impact until such time as the natural resources and services have recovered to their baseline condition or to some other condition.

The main assumption of resource equivalency is that the public can be compensated for losses in natural resources and/or services through the provision of the same type of services at a different location. The resource equivalency approach equates the present values of the impacts (debit) to the natural resource and/or service with the present value of the predicted gains (credit) in natural resources and/or services provided by restoration actions.

In my view, mitigation should be required and should be equated using resource equivalency to offset the predicted impact. But voluntary mitigation should also be allowed to enable industry to establish "credits" to be used to offset future or preexisting impacts. Further, remediation and reclamation of abandoned mines could be used as a form of mitigation. It seems that the size and type of mitigation projects are usually selected arbitrarily and without knowing if the mitigation offsets the expected negative impacts resulting from a proposed activity. Instead, mitigation should be scaled to essentially provide no net loss of environmental resources and services to humans provided by the environment.

Response: We concur with your assessment of mitigation. It is BLM's intent to use a three-tiered approach to mitigation. First we would encourage avoiding the impact, second minimizing the impact, and third mitigating the impact. Mitigation would be applied on a limited bases if this process is followed. BLM's intent is to maintain a equal level of environmental resources pre and post mining.

19.15 **Comment:** Environmental review under the existing rules is comprehensive and thorough. The EIS documents required and used by BLM address all identified environmental impacts, including water and air quality, access and other land uses, visual resources, water supply and hydrology, wildlife, vegetation, cultural resources, and socioeconomic consequences. The existing rules ensure comprehensive evaluation of potential environmental impacts, evaluation of means to minimize those impacts, mitigation of certain impacts, mitigation of certain impacts, environmental controls, reclamation, and financial assurance for reclamation obligations.

Neither the draft EIS nor the preamble to the proposed rules provides examples of how BLM has been unable to determine applicable and appropriate environmental standards for approval of proposed mining operations or the lack of any standards that have resulted in BLM's approving environmentally damaging mining operations under the existing regulations. Indeed, clear standards for environmental protection are supplied by state and federal environmental laws governing air quality, water quality, waste management, wildlife protection, cultural resources protection, etc. That the standards established by other laws are only relied upon and not duplicated in the existing regulations is hardly a justification for establishing a new set of standards.

Response: We determined that more standards would help in defining and preventing unnecessary or undue degradation. This determination was based upon input from BLM field offices.

19.16 **Comment:** The proposed rule mischaracterizes the performance standards as flexible and outcome based.

Response: We considered several approaches for developing standards. We considered developing for exploration, mining, and reclamation, specific design and operating requirements that specified how operations had to be designed, built, and operated. Alternative 4 of the EIS proposes this approach. But for the Proposed Action we rejected these requirements as too inflexible and impracticable given the wide variation in conditions and circumstances experienced in mining operations on the public lands. We selected a approach to standards that looks for the outcome or accomplishment an operator must achieve. This method placed a minimum emphasis on how a operator must conduct an activity as long as the desired outcome is met. This method gives the operator the maximum flexibility to conduct operations in a cost-effective and innovative fashion. To implement the new regulations BLM will review the Notice or Plan of Operations to determine if it is reasonably likely to meet each outcome-based performance standard but would not require any specific design to be used.

19.17 **Comment:** The proposed rule cannot require mitigation for normal surface disturbances caused by mining (proposed Section 3809.5,.40(a)(4)).

Response: Section 302(b) and 303(a) of FLPMA, 43 U.S.C. 1732(b) and 1733 (a), and the Mining Law, 30 U.S.C. §22, give BLM the authority for requiring mitigation. Mitigation measures fall squarely within the actions the Secretary of the Interior can direct to prevent unnecessary or undue degradation of the public lands. An impact that can be mitigated but is not is clearly unnecessary. Section 303 (a) directs the Secretary to issue regulations for the "management, use and protection of the public lands...." In addition, 30 U.S.C. §22, allows the location of mining claims subject to regulation. Taken together, these statutes clearly authorize the regulation of environmental impacts of mining through measures such as mitigation.

19.18 **Comment:** BLM has asked for comment on whether compensatory mitigation projects should be voluntary or mandatory. Apart from the critical fact that BLM lacks statutory authority to demand compensatory mitigation (as explained in the NMA comments), a mandatory approach to these projects will be counterproductive. A mandatory approach will place BLM in the position of dictating the nature of the compensation and the amount. These determinations will likely become the subjects of appeals and litigation by mine operators and mine opponents. BLM will transform a successful voluntary process based on mutual cooperation into one based upon intimidation and confrontation.

Response: Section 302(b) and 303(a) of FLPMA, 43 U.S.C. 1732 (b) and 1733 (a), and the Mining Law, 30 U.S.C. §22, give BLM the authority for requiring mitigation. Mitigation measures fall squarely within the actions the Secretary can direct to prevent unnecessary or undue degradation of the public lands. An impact that can be mitigated but is not is clearly unnecessary. Section 303 (a) directs the Secretary to issue regulations for the "management, use and protection of the public lands...." In addition, 30 U.S.C. §22, allows the location of mining claims subject to regulation. Taken together, these statutes clearly authorize the regulation of environmental impacts of mining such as mitigation.

BLM will approach mitigation from a mandatory basis where needed to prevent unnecessary or undue degradation. For example, if due to the location of the ore body, a riparian area must be disturbed, mitigation may be required outside the area of disturbance. If a suitable site for riparian mitigation cannot be found on site, the operator may voluntarily chose, with BLM's concurrence, to mitigate the impacts to the riparian area offsite. Regardless, the impact to the riparian area must be properly mitigated for the operation to avoid unnecessary or undue degradation. Mitigation is based upon avoiding or reducing the impacts of an activity. Since impacts from mining are not confined to just the area of direct surface disturbance, it then follows that mitigation of these impacts would not necessarily be confined to the area of surface disturbance.

19.19 **Comment:** 3809.420(a)(2) requires an operator to follow a "reasonable and customary mineral exploration, development, mining and reclamation sequence." Neither the mining laws nor FLPMA authorizes BLM to regulate such processes. In addition, this provision assumes that some operators would deviate from a logical mining sequence without reason. No rational operator would adopt a abnormal production sequence without some significant production-related reason for doing so, and BLM should not be able to interfere in such business decisions. Also, if BLM encounters such "extreme cases," they would be more properly dealt with under the use and occupancy regulations.

Response: There have been past instances where operators have created unnecessary impacts by not following a reasonable and customary mineral development sequence. To avoid unnecessary or undue degradation (UUD), we included activities that are not "reasonably incident to prospecting, mining, or processing operations." Review of sequencing will be applied on a large scale and not to regulate small portions of an operation. The definition of UUD recognizes that FLPMA amended the mining laws, subject to valid existing rights, by limiting the right to develop locatable minerals to those operations that prevent UUD.

19.20 **Comment:** 3809.420(a) (2). The term "reasonable" should be removed and substituted with logical. The definition of unnecessary does not include reasonable. Reasonable is a relative term; logical is not. This is a problem when the public reviews and comments on 3809.411(d)

Response: We think it is clear to both operators and BLM what is intended in §3809.420 (a) (2) requires an operator to follow a reasonable and customary mineral exploration, development, mining, and reclamation sequence.

19.21 **Comment:** Proposed 3809.42(a)(4) requires the operator to take "mitigation" measures specified by BLM "to protect public lands." Mitigation would be determined on a case-by-case basis" (64 Fed. Reg. 6437, col.1) and, under the definition of "mitigation," may include "avoiding the impact altogether," i.e., prohibiting operations, or compensating for the impact. This sentence should be revised to read "You must take mitigation measures necessary to prevent unnecessary or undue degradation."

Response: Mitigation is required to prevent unnecessary or undue degradation. Operators must avoid the impact altogether by not taking an action or certain parts of an action; minimizing the impact by limiting the degree or magnitude of the action and its implementation; rectifying or eliminating the impact by repairing, rehabilitating, or restoring the affected environment; reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and compensating for the impact by replacing or providing substitute resources or environments. Mitigation measures have to be presented in the Plan of Operations as part of the demonstration of how the proposed operation would not cause unnecessary or undue degradation or developed through the NEPA process and made conditions of approval to the Plan of Operations.

19.22 **Comment:** Proposed 3809.420(b)(3) requires avoiding locating operations in wetlands and riparian areas "where possible." As with the use of the term "feasible," this term "possible" should be replaced with the term "economically and technologically practicable."

Response: Avoiding impacts to wetland and riparian areas does not depend on economic or technical practicality. If impacts to wetland and riparian areas are unavoidable, then they must be mitigated regardless of cost. The cost of avoiding or mitigating impacts is a consideration in the viability of an operation.

19.23 **Comment:** Proposed 3809.420(b)(3)(iii) requires "mitigation" such as "restoration or replacement" for the loss of "non-jurisdictional" is not defined. The phrase "such as restoration or replacement" should be deleted and the phrase "to the extent economically and technologically practicable" should be substituted.

Response: We have modified the proposed final rule 3809.420 (b) (3) (ii). Where economically and technically feasible, you must return disturbed wetlands and riparian areas to proper functioning condition. If impacts to wetland and riparian areas are unavoidable, then they must be mitigated regardless of cost. Avoiding impacts to wetland

and riparian areas does not depend on economic or technical practicality. The cost of avoiding or mitigating impacts is a consideration in the viability of an operation. Non-jurisdictional wetlands and riparian areas would be those that do not meet the definition of jurisdictional wetland by the U.S. Army Corps of Engineers (COE) but meet the definition of riparian area or wetland used by BLM.

19.24 **Comment:** Applying the performance standards, as written, to Notice-level operations is burdensome and unwieldy. BLM should consider an alternative that would impose less restrictive performance standards on Notice-level operations. Barrick believes that such an alternative would achieve a comparable measure of environmental protection with less administrative burden on the agency and economic burden on the industry.

Response: Notice-level operations will now apply only to exploration. All mining will require a Plan of Operations. Regardless of the size of operation or if it is exploration or mining, it must comply with the performance standards in order to protect public land resources. The performance standards are outcome based and give the operator the greatest level of flexibility in how to meet the performance standards.

19.25 **Comment:** Section 3809.420(a)(4) Mitigation. Without further direction, this paragraph gives BLM employees essentially unbridled authority to require offsite compensation for environmental impacts. Section 3809.420(b)(3) Wetlands and Riparian Areas. This section appears to eliminate almost all placer mining in Alaska. Its emphasis on mitigation and compensation for wetland riparian areas is inappropriate to the scale of impacts that mining is likely to create in Alaska. The existing Army Corps of Engineers (COE) regulation of wetland impacts is adequate to protect their function. The performance standards in this section provide a duplicate and largely stricter standard that will be difficult or impossible to fulfill. Minor loss of wetland from mining is generally not required to be compensated for by the COE. The requirements in this subsection would appear to require compensation or rebuilding wetlands, which is generally not practical in Alaska. Finally, the exhaustive list of riparian function in paragraph (ii) means that it will not be possible to reclaim wetlands within a defined period of time. We believe that standard reclamation practices will return riparian areas to their full functioning condition. But it may take many years before the full list of functions in this subsection can be confirmed. We therefore believe more wetland protection beyond that provided by the COE is unnecessary or duplicative and should be removed from these proposed regulations.

Response: BLM will approach mitigation on a mandatory basis, where mitigation can be performed onsite, and on a voluntary basis, where mitigation will be necessary offsite. But mitigation will still be required to avoid unnecessary or undue degradation. For example, if because of the location of the ore body, a riparian area must be affected, mitigation can be required on the public land within the area of mining operations. If a suitable site for riparian mitigation cannot be found on site, the operator, with BLM's concurrence, may

voluntarily chose to mitigate the impacts to the riparian area off site. Regardless, impacts must be properly mitigated for the operation to avoid unnecessary or undue degradation. BLM recognizes that dredging and filling are regulated by the U.S. Army Corps of Engineers (COE). The §3809 regulations do not duplicate the existing COE regulatory process under §404 of the Clean Water Act. The §3809 regulations, in fact, complement the COE responsibility over jurisdictional wetlands. Not all riparian areas contain vegetation dependent upon saturated soil that qualifies them as jurisdictional wetlands. As a land management agency, BLM manages wetlands and riparian areas to maintain their proper functioning condition. This role is different and not duplicative of the COE responsibility over jurisdictional wetlands. §3809.420 (b) (3) *Wetlands and riparian areas* would govern wetlands and riparian areas that are not considered "jurisdictional wetlands." Post-reclamation riparian proper functioning condition would have to be achieved or significant progress be made toward proper functioning condition for reclamation to be determined complete.

19.26 **Comment:** Mitigation. The definition of mitigation includes offsite compensation and replacement. In Alaska, state and federal agencies prefer to emphasize onsite mitigation, which is workable in nearly all instances. Unlike much of the U.S., Alaska has an abundance of most habitat types. Small losses of any individual habitat type rarely have significant effects on fish and wildlife populations. Those habitat losses, when unavoidable, should be reclaimed as part of the project, thus avoiding offsite compensation for wetland-riparian impacts in Alaska. The Army Corps of Engineers rarely requires offsite compensation for wetland impacts in Alaska. We see no reason why BLM should be different. Off-site compensation or replacement may be justified in limited circumstances if impacts threaten a life-state of a local important population of wildlife. In the few cases where this occurs, the compensation or replacement should be targeted at sustaining that specific population. A general authority to require offsite compensation or replacement is misguided.

Response: BLM will approach mitigation on a mandatory basis, where mitigation can be performed onsite, and on a voluntary basis, where mitigation will be necessary offsite. But mitigation will still be required to avoid unnecessary or undue degradation. For example, if because of the location of the ore body, a riparian area must be disturbed, mitigation can be required on the public land within the area of mining operations. If a suitable site for riparian mitigation cannot be found on site, the operator, with BLM's concurrence, may voluntarily chose to mitigate the impacts to the riparian area off site. Regardless, impacts must be properly mitigated for the operation to avoid unnecessary or undue degradation.

19.27 **Comment:** Operating, monitoring, and reclamation plan requirements require further clarification in addressing the proportionately puny impact of suction dredge activity. Throughout the 3809.420 standards and Plan requirements, language must be inserted to acknowledge the difference in scale between a suction dredge operation and an open pit cyanide leaching operation. Many of the boilerplate standards (i.e. water quality,

backfilling) do not apply to suction dredge operations but may be randomly misconstrued and applied overzealously. It must be clear that BLM requirements for monitoring and reclamation planning are proportionately scaled, and in the instance of a suction dredge mining operation, related to development of access occupancy or other incidental surface disturbance.

Response: Regardless of the size, the operation must comply with all performance standards. Some standards may not apply to certain operations. Suction dredge operations may affect benthic (bottom dwelling) and/or invertebrate communities; fish and fish eggs and fry; other aquatic or riparian-dependent plant and animal species; channel morphology, which includes the bed, bank, channel, and flow of rivers; water quality and quantity; and riparian habitat next to streams and rivers. In response to public comments, we modified the proposed rule to remove the 4-inch or less intake diameter on suction dredges. §3809.31 (b) now reads, "If your operations involve the use of a suction dredge, the state requires an authorization for its use, and BLM and the State have an agreement under §3809.201 addressing suction dredging, then you need not submit a notice or a plan of operations unless otherwise required by this section. For all other use of a suction dredge, you must submit to BLM either (1) a notice if your operations consist of exploration causing surface disturbance of 5 acres or less of public lands on which reclamation has not been completed, See §3809.21 or, (2) a plan of operations for all other operations greater than casual use." See §3809.400 through §3809.434.

19.28 **Comment:** Compensation or mitigation for permanent damage (i.e. unavoidable impacts) to public lands is not addressed, defined, conceptualized, or examples cited, and should be addressed in your final EIS, particularly when increasing questions are being raised on why tax payers are stuck with the responsibility of huge waste rock dumps, etc., abandoned on public lands, if not on private patented lands, by departed if not defunct companies. This is important under the adage, "If it doesn't work, fix it!"

Response: Mitigation as defined in 40 CFR 1508.20 may include one or more of the following: (1) avoiding the impact altogether by not taking a certain action or parts of an action; (2) minimizing impacts by limiting the degree or magnitude of the action and its implementation; (3) rectifying the impact by repairing, rehabilitating, or restoring the affected environment; (4) reducing or eliminating the impact over time by preservation and maintenance during the life of the action; and (5) compensating for the impact by replacing or providing substitute resources or environments. The preamble to the proposed rule of 2/9/99 gave an example of how mitigation would apply to riparian areas. Wetlands and riparian areas often occur in the topographically low portions of the project area, which are also preferred by mine operators as natural containment basins for waste rock placement or construction of tailings impoundments or leaching facilities, and, of course, placer operations almost exclusively operate in these areas. 3809.420 (a) (4) and (b) (3) (iii) would establish a hierarchy of (1) avoiding locating in, (2) minimizing impacts to, and (3) mitigating damage to wetland and riparian areas. This provision would minimize to

the extent feasible, disturbance in these areas and promote restoration of unavoidable disturbances.

19.29 **Comment:** The reference to the need to "restore" losses reveals the difficulty BLM will have in mandating compliance with its proposed requirements. Specifically, restoration of a resource is more often than not an unreasonable expectation. The Army Corps of Engineers and EPA recognize that reality as part of their mitigation guidelines. Even if the mitigation requirements are retained in some form, BLM should eliminate the reference to "restoration" of resources.

Response: Restoration is used in the context of mitigation. Mitigation is defined in 40 CFR 1508.20, may include one or more of the following: (1) avoiding he impact altogether by not taking a certain action or parts of an action; (2) minimizing impacts by limiting the degree or magnitude of the action and its implementation; (3) rectifying the impact by repairing, rehabilitating, or restoring the affected environment; (4) reducing or eliminating the impact over time by preservation and maintenance during the life of the action; and (5) compensating for the impact by replacing or providing substitute resources or environments. We recognize that restoration is difficult to accomplish. Restoration must be viewed in the context of mitigation.

19.30 **Comment:** Why are performance standards needed beyond those already in place?

Response: We determined that more standards would help operators and BLM in defining and preventing unnecessary or undue degradation.

19.31 **Comment:** BLM should consider adding language to proposed 3809.420 clarifying that rehabilitation does not mean restoration to predisturbance levels and also is not required where it is not feasible or practicable or where it is inconsistent with the planned post-mining land use.

Response: Reclamation means taking measures required by this subpart following disturbance of public lands caused by operations to meet applicable performance standards and achieve conditions required by BLM at the conclusion of operations. Components of reclamation include where applicable: (1) isolation, control, or removal of acid-forming, toxic, or deleterious substances; (2) regrading and reshaping to conform with adjacent landforms, facilitate revegetation, control drainage, and minimize erosion; (3) rehabilitating fisheries or wildlife habitat; (4) placing growth medium and establishing self-sustaining revegetation; (5) Removing or stabilizing buildings, structures, or other support facilities; (6) plugging drill holes and closing underground workings; and (7) providing for postmining monitoring, maintenance, or treatment. Restoration is used in the context of mitigation. Mitigation as defined in 40 CFR 1508.20, may include one or more of the following: (1) avoiding he impact altogether by not taking a certain action or parts of an action; (2) minimizing impacts by limiting the degree or magnitude of the action and its

implementation; (3) rectifying the impact by repairing, rehabilitating, or restoring the affected environment; (4) reducing or eliminating the impact over time by preservation and maintenance during the life of the action; and (5) compensating for the impact by replacing or providing substitute resources or environments. Whether reclamation is feasible or practicable is a economic determination for the operator to make in deciding to conduct the operation.

19.32 **Comment:** National performance standards similar to those outlined in Alternative 4 should be adopted to protect water quality and quantity, fish, flora, and wildlife. In addition, a risk assessment program should be established to help determine the suitability of known mineralized sites for mining and prioritize sites for mineral entry according to impacts on the environment.

Response: We considered several approaches for developing standards. We considered developing standards for exploration, mining, and reclamation design and operating requirements that specified how operations had to be designed, built, and operated. But we rejected this approach as too inflexible and impracticable given the wide variation in conditions and circumstances in mining on the public lands. BLM selected a approach to standards that looks for the outcome or accomplishment an operator must achieve for the proposed final regulation. This method placed a minimum emphasis on how a operator must conduct an activity as long as the desired outcome is met. This method also gives the operator the greatest flexibility to conduct operations in a cost-effective and innovative fashion. To implement the new regulations BLM will review the Notice or Plan of Operations to determine if it is reasonably likely to meet each outcome-based performance standard but would not require any specific design to be used. We think determining suitable areas for mining should be left to operators. Mining under the Mining Law is allowed subject to compliance with the §3809 regulations.

19.33 **Comment:** The final regs must contain explicit provisions for ground water protection (including acid lakes and rivers) as well as reclamation standards requiring restoration of mine sites to per-mining condition.

Response: We considered establishing a numeric standard for ground water affected by operations. Currently, there is no federal ground water standard, and several states do not have their own ground water standards. We decided not to propose a numeric standard because of the difficulty of designing a nationwide numeric standard relevant to the range of conditions and public use levels near mine sites. We believe that the states are better positioned to develop ground water standards that apply within their borders. Instead, the regulations adopt a pollution minimization requirement, in preference to treatment or remediation, and rely on state standards for ground water protection where the standards are present. To implement the new regulations BLM will review the Notice or Plan of Operations to determine if it will meet each outcome-based performance standard but would not require any specific design.

19.34 **Comment:** Add county laws to the list of laws and requirements for air quality. There is at least one county in Nevada that has had the air quality permit program delegated down to it from the State.

Response: We have modified the proposed rule to incorporate your comment as follows: (b) *Environmental performance standards.* (1) *Air Quality.* Your operations must comply with applicable Federal, Tribal, State, and where delegated by the state, local government laws and requirements.

19.35 **Comment:** Compliance must include county and local laws in addition to Federal, tribal and state with respect to air and water and environmental quality protection.

Response: We have modified the proposed rule to incorporate your comment as follows: §3809.420 (b) *Environmental performance standards.* (1) *Air Quality.* Your operations must comply with applicable Federal, Tribal, State, and where delegated by the state, local government laws and requirements. (b) (2) (i) *Surface water.* (A) Releases to surface water must comply with applicable Federal, Tribal, State, interstate and where delegated by the state, local government water quality laws and requirements. (c) (7) (iii) Water quality in pits and other water impoundments must comply with applicable Federal, State and where delegated by the state, local government standards. We eliminated from the pit water quality requirement, the Tribal standards compliance since pits under the jurisdiction of BLM will not be located on Tribal lands.

19.36 **Comment:** 3809.420 (7) Cultural, paleontologic, and cave resources, (C) (iii) requires that the operator pay mitigation and recovery in one way or another; this is onerous and, in most cases, unnecessary.

Response: We believe that since operators are responsible for the disturbance and are generating revenue from the extraction or publicly owned locatable minerals, they receive a benefit from the investigation and recovery (the ability to continue to operate) and, thus generally should be responsible for the costs of investigation, recovery, and preservation as a cost of doing business on public lands. If BLM incurs costs for investigation and recovery and preservation of these resources, we will recover the costs from operators on a case-by-case basis, after an evaluation of the factors set forth in section 304(b) of FLPMA.

19.37 **Comment:** The current 3809 regulations do a good job covering reclamation, and I consider no changes are needed.

Response: In 1981 BLM committed to review the §3809 regulations after 3 years; 18 years later BLM's review of the regulations showed that several areas needed to be updated for clarification, both to operators and to BLM. In addition, mining technology and economics have change greatly since 1980, and the reclamation requirements need to

reflect those changes.

19.38 **Comment:** Eliminate the "inactive mine" loophole on reclamation. Demand and get operator-financed reclamation starting immediately after the cessation of active mineral extraction. The public deserves no less.

Response: §3809.420 (a) (5) *Concurrent reclamation* states "You must initiate and complete reclamation at the earliest economically and technically feasible time on those portions of the disturbed area that you will not disturb further." There is no "loophole" for inactive mines.

19.39 **Comment:** 3809.420 Section (5) concurrent reclamation, states that you must initiate and complete reclamation at the earliest feasible time on those portions of the disturbed area that you will not disturb further. It will be difficult to make a determination of the earliest feasible time. This requirement is ideal but difficult to enforce in practice.

Response: We changed §3809.420 (a) (5) *Concurrent reclamation.* To address the feasibility of concurrent reclamation BLM added consideration for economic and technical feasibility. It now reads "You must initiate and complete reclamation at the earliest economically and technically feasible time on those portions of the disturbed are that you will not disturb further." We think that operators can determine areas that will not be disturbed further and conduct reclamation on those areas.

19.40 **Comment:** EPA supports initiating performance standards as being the basis for determining if reclamation has been acceptable. We assume that this means that for habitats that have been restored, the applicant must also demonstrate habitat functionality as defined to some predetermined standard. In other words, restored lands must not only have the appearance of being restored, but should be contributing to the ecosystem dynamics and energy flow through the watershed as well. EPA does believe, however, that all sites, regardless of locale, should be restored to the approximate original contours (AOC), where practicable. The disruption caused by mining and spoil disposal affects the entire watershed, not just the site of the mine and fill area. EPA recommends that the final EIS include AOC as a reasonable standard that should be common to most reclamation activities, regardless of locale.

Response: Although concerns over approximate original contour requirements are outside EPA's area of jurisdiction, responsibility, and expertise, the concept of returning terrain to approximate original contour is one component of reclamation. See proposed final §3809.420 (c) (6) (ii) *Stability, grading and erosion control.* "You must recontour all areas to blend with-pre-mining, natural topography to the extent feasible. You may temporarily retain a highwall or other mine workings in a stable condition to preserve evidence of mineralization." And §3809.420 (c) (7) *Pit Reclamation* "Based upon the site specific review of section .401 and environmental analysis of the plan of operations, BLM

may determine the amount of backfilling required, taking into consideration economic, environmental and safety concerns." BLM will determine the standard for fish and wildlife habitat rehabilitation and its functionality.

19.41 **Comment:** Waste dumps should not be permitted on nonmining claims nearby.

Response: § 3809 does not address whether waste dumps can be located on particular mining claims or unclaimed lands. The issue raised by the commenters, in part, relates to whether locating waste dumps on mining claims affects the validity of those claims under the Mining Law. This is an issue the Department of the Interior is examining but is not directly a part of the current rulemaking.

19.42 **Comment:** If mining companies cannot meet these standards, then they should not be permitted to mine. It is our public lands, and many of us have to live with the legacy of these mines well into the future. I am one who wants to see a clean, sustainable future for public lands.

Response: We determined that more standards would help both operators and BLM in defining and preventing unnecessary or undue degradation. In implementing the regulations BLM would review the Notice or Proposed Plan of Operations to determine if it will meet each outcome-based performance standard, but we would not require that any specific design be used. If a operation cannot achieve a performance standard, then BLM will not approve the Plan of Operations.

19.43 **Comment:** I am not opposed to mining. I am solely opposed to the irresponsible acts that are currently tolerated. I wish to see stronger regulations, including the elimination of vague wording, improved inspection, the provision of adequate bonding, granting land managers the discretion to meet FLPMA standards, and requiring the mining industry to comply with "best available technology and practices." With these changes, the mining industry will continue to profit from its endeavors and help curb environmental degradation.

Response: To clarify to operators, BLM, and the public which performance standards operators must comply with when operating on the public lands, we determined that more standards would help in defining and preventing unnecessary or undue degradation. BLM is the land manager responsible for ensuring that operations on land under its jurisdiction comply with federal, state, tribal, and local environmental requirements. We received many comments on best available technology and practices (BATP) and most appropriate technology and practices (MATP). BATP has certain regulatory requirements in air quality requirements and doesn't lead to innovation and development of new technology. The definition of MATP also served to confuse and not add value to the regulations and has been eliminated from the regulations. But operators must use equipment, devices, and practices that meet the performance standards. Throughout this regulatory effort BLM

has attempted to maintain a outcome-based philosophy in developing performance standards. We want to focus on the outcome or accomplishment the operator must achieve. These outcome-based performance standards place a minimum emphasis on how the operator must conduct operations as long as the desired outcome is met. Giving the operator maximum flexibility encourages innovation and fosters the development of low-cost solutions. In implementing the regulations, BLM would review the Notice or proposed Plan of Operations to determine if it will meet each outcome-based performance standard. But we would not require that any specific design be used.

19.44 **Comment:** We need to prevent perpetual pollution, which is a fancy phrase that just basically says there are currently mines that acknowledge up front that they will pollute forever, that pollution will be running off of them forever. And there needs to be some sort of management of that, whether it be concrete channels, whether it be land management involvement and open pit, which is backfilling now with contaminated waters. Permitting mines that acknowledge from the start they are going to have perpetual pollution is an inappropriate legacy to hand over to future generations.

Response: The issue of denying a Plan of Operations that predicts long-term (>20 years) water treatment as necessary was proposed by BLM initially and rejected by EPA. Without substantial support for this position, BLM dropped this provision from further consideration. We have addressed the issue of long-term water treatment in §3809.420 (c) (4) (vi) detoxification of leaching solutions, heaps, and management of tailings during closure and final reclamation and requiring all materials and discharges to meet standards upon completion of final reclamation. In addition, if needed, BLM may now require (see §3809.552 (c)) that financial guarantees establish a trust fund or other financial mechanism for BLM to ensure the continuation of long-term treatment to achieve water quality standards and other long-term postmining maintenance requirements.

19.45 **Comment:** I question the need for supplemental and potentially confusing environmental standards being proposed by BLM. The regulations would establish specific facility construction and operating requirements and impose environmental performance standards beyond those already established under state and federal regulatory programs. The regulations would require that waste rock, tailings, and leach pads be located, designed, built, operated, and reclaimed to "minimize," which potentially means to eliminate, 'infiltration and contamination of surface and ground water." The regulations would establish BLM, under the guise of evaluating facility design and construction, as the agency with the ultimate authority over regulation of surface or ground water at mining operations.

Response: To clarify to operators, BLM, and the public which performance standards operators must comply with when operating on the public lands, we determined that more standards would help in defining and preventing unnecessary or undue degradation. BLM is the land manager responsible for ensuring that operations on land under its jurisdiction

comply with federal, state, tribal, and where delegated by the state, local government environmental requirements. BLM does not take enforcement actions for violation of federal, state, tribal, or local environmental requirements. But if operators are cited for such violations, BLM will notify operators that they are in noncompliance with their Plans of Operations and give them compliance notices. Several approaches were considered for developing standards. We considered developing for exploration, mining, and reclamation specific design and operating requirements that specified how operations had to be designed, built, and operated. But we rejected these requirements as being too inflexible and impracticable given the wide variation in conditions and circumstances experienced in mining operations on the public lands. Instead we selected an approach that looks for the outcome or accomplishment an operator must achieve. This method put a minimum emphasis on how operators must conduct activities as long as they meet desired outcomes. This method gives operators the greatest flexibility to conduct operations in a cost-effective and innovative fashion. To implement the new regulations BLM would review the Notice or Plan of Operations to determine if it is reasonably likely to meet each outcome-based performance standard, but would not require any specific design to be used. Throughout this regulatory effort we have attempted to maintain an outcome-based philosophy in developing performance standards. We think that the performance standards included in §3809.420 are outcome based. We have modified the definition of "minimize" to clarify its intent. Minimize means to reduce the adverse impact of an operation to the lowest practical level. During review of operations, BLM may determine that it is practical to avoid or eliminate particular impacts.

19.46 **Comment:** We appreciate that the draft rules would allow regulators to require miners to prevent impacts. But leaving up to regulators the decision over when to reduce an impact to a level that is economically desirable and when to avoid the impact altogether to make on a case-by-case basis is certainty to no one, not to the public and not to mining companies. WORC believes that certain impacts should always be required to be prevented, and we will elaborate on these in our written comments.

Response: It is BLM's land management responsibility to determine when it is practical to avoid or eliminate particular impacts for operations on lands under its jurisdiction.

19.47 **Comment:** 3809.420(a)(3) Define sustainable as it pertains to mining. Can mining stay in operation and be considered sustainable? This section should clarify how an operator can include cattle or livestock grazing in a reclamation plan. Operators are consistent with the performance standards and BLM land policy if they improve the land and the grazing of the land. Operators must have the option of using livestock or replanting to accelerate the reclamation process to achieve certain violation of the unnecessary or undue standard. This option is not in the proposed rules.
Response: §3809.420 (a) (3) addresses *Land use plans*. Postmining land use could include livestock grazing, but livestock grazing isn't required. Specifics on the use of livestock to achieve certain reclamation requirements could be in the reclamation plan,

which BLM would review to ensure that the reclamation standards would be achieved.

19.48 **Comment:** Reclamation. Define the measurement to be used to determine a disturbance. Reference is made to applicable performance standards. What applicable performance standards? Identify them. Also the requirement for the operators to meet the conditions required by the government. What conditions? Where are these conditions required by the government. What conditions? Where are these conditions defined? Postmining monitoring, maintenance, or treatment. What are the standards for this function. What is the period of time. What is maintenance and what is treatment? Define the standards you will expect for both of these.

Response: A disturbance is anything caused by operations that BLM determines is a change from the preoperation condition of the public lands. Applicable performance standards are those in §3809.420. Conditions required by BLM referred to in the definition of reclamation are such physical or biological status as proper functioning condition of riparian areas, fish and wildlife habitat, proper road design, or safety conditions required in §3809.420. Postmining monitoring, maintenance, and treatment are components of reclamation. BLM will determine acceptable postmining monitoring, maintenance, or treatment when reviewing an operator's reclamation plan (see §3809.401 (b) (3)). The time period will depend on the specifics of the proposed operation.

19.49 **Comment:** Performance standards. Recommend updating regulations to describe best available technology, establish reclamation standards and guidelines, possibly create a subcommittee to the resource advisory councils (RACs), and establish public input/procedures on an ecological region basis to establish reclamation standards and guidelines and emphasize that many cost-effective technologies can be effectively scaled down for small operations.

Response: We received many comments on "best available technology and practices" (BATP) and "most appropriate technology and practices" (MATP). BATP has certain regulatory requirements in air quality and doesn't lead to innovation and development of new technology. Therefore, BLM has eliminated the term MATP but requires the use of equipment, devices, and practices to meet the performance standards. Throughout this regulatory effort we have attempted to maintain a outcome-based philosophy in developing performance standards. We want to focus on the outcome or accomplishment the operator must achieve. These outcome-based performance standards place a minimum emphasis on how operators must conduct operations as long as the operations meet the desired outcome. These standards give operators the greatest flexibility, encourage innovation, and foster the development of low-cost solutions. In implementing the regulations, BLM would review the Notice or proposed Plan of Operations to determine if it is reasonably likely to meet each outcome-based performance standard. But we would not require any specific design be used. BLM thinks it has established reclamation standards in §3809.420. The performance standards in this section are synonymous with

or will achieve the Standards of Rangeland or Public Land Health developed in conjunction with BLM's resource advisory councils.

19.50 **Comment:** Reclamation. Definition needs to be expanded to clearly include environmental degradation such a addressing Clean Water Act violations, Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) release, and/or Resource Conservation and Recovery Act (RCRA) "disposal into the environment." (For example, if a liner begins to leak and long-term remediation is required, the bond covers onsite landfills, bioremediation of petroleum spills, and other onsite remediation permitted under other authorities.) BLM placed the reclamation definition "sideboards" on ourselves when the regulations were first promulgated (e.g. referencing reshaping, revegetation, etc.) If one interprets "Reclamation means taking such reasonable measures as will prevent unnecessary or undue degradation of the Federal lands" and "unnecessary and undue degradation is "Failure to comply with applicable environmental protection statutes and regulations thereunder will constitute unnecessary or undue degradation," then reclamation and reclamation bonds could cover environmental degradation under other laws. Some staff have interpreted that reclamation already covers remediation, acid mine drainage, remediation of groundwater and other laws. Others apply 3809 reclamation bonds as only reclamation (reshaping, reveg., etc). All of this needs to be clear in these regulations, and failure to comply with other laws should be subject to bonding.

Response: The performance standards of §3809.420 clearly address Clean Water Act (CWA) violations, CERCLA release, and/or RCRA "disposal into the environment." BLM must require reclamation and reclamation bonds for environmental degradation on public land that is required in other laws such as the CWA, CERCLA, and RCRA. Acid rock drainage and impacts to ground water must be bonded for and remediated if they affect public lands.

19.51 **Comment:** Under Section 3809.420, BLM could disapprove operations that fail to satisfy the performance standards. I think that section gives BLM too many discretionary powers, to determine that it has failed to satisfy the performance standards. I think you can accomplish the same thing by the bonding rules under the financial guarantees because at the point that you attach that the unnecessary or undue degradation is encountered, you can establish a bond that's high enough that makes an operation uneconomic.

Response: If an operator cannot successfully demonstrate that a proposed Plan of Operations will not cause unnecessary or undue degradation of the public lands, then BLM must deny the Plan of Operations. To prevent unnecessary or undue degradation of the public lands, operations must comply with the performance standards in §3809.420. There is no point in attempting to bond operations that cannot prevent unnecessary or undue degradation.

19.52 **Comment:** I note that BLM would mandate the use of "most appropriate technology and practices (MATP) to prevent or control the discharge of pollutants to surface water, despite the fact that the Clean Water Act program being administered by the state already imposes particular technology-based performance standards on certain discharges from mining operations. For example, discharges of total suspended solids must meet minimum technology-based effluent limitations established by federal law. BLM's proposed imposing of yet another technology-based requirement on such a discharge would create needless duplication.

Response: BLM would, as it does currently, coordinate its review of operations with the authority regulating water quality to ensure that (1) the water quality standards could be met by the proposed technology and (2) there is no duplication. We have eliminated the requirement to use MATP to meet the performance standards in response to public comments. Instead, we require the use of equipment, devices, and practices that will meet the performance standards in §3809.420.

19.53 **Comment:** 3809.420 (a) Define the relationship between MATP requirements and the performance standards.

Response: We have eliminated the term MATP in the final rule. Instead, we require the use of equipment, devices, and practices that will meet the performance standards in §3809.420.

19.54 **Comment:** Most appropriate technology and practices (MATP) interferes directly with a company's ability to make a profit. Only the company should judge what procedures or technologies are "most appropriate" in the conduct of its business. BLM's job is to ensure that the effects do not harm the environment. BLM has a vital role in overseeing the management of public land and ensuring that undue degradation does not occur. Under proposed rule 3809.420, BLM states that the regulations should "focus on the outcome or accomplishment that the operator must achieve. These outcome-based performance standards put minimum emphasis on how the operator conducts the activity so long as the desired outcome is met." The concept of MATP conflicts directly with BLM's stated purpose of defining outcome-based performance standards. MATP is a bad idea. It's overly vague and encourages arbitrary management of the public lands. It gives BLM too much power over a company's ability to make a profit and contradicts BLM's own stated objective of outcome-based performance. MATP should be removed from consideration in these rules.

Response: In response to public comments we have eliminated the term MATP in the final rule. Instead, we require the use of equipment, devices, and practices that will meet the performance standards in §3809.420. Throughout this regulatory effort BLM has attempted to maintain an outcome-based philosophy in developing performance standards. We want to focus on the outcome or accomplishment the operator must achieve. These

outcome-based performance standards place a minimum emphasis on how operators must conduct operations as long as the desired outcome is met. Outcome-based performance standards give operators the most flexibility, encourage innovation, and foster the developing of low-cost solutions. In implementing the regulations, BLM would review the Notice or proposed Plan of Operations to determine if it will meet each outcome-based performance standard. But we would not require any specific design.

19.55 **Comment:** "Customary practices" leave too much to the imagination, and in many cases might be construed as doing nothing. I would suggest wording such as "economically feasible best available technology."

Response: Reasonable and customary appears at §3809.420 (a) (2) *Sequence of operations.* You must avoid unnecessary impacts by following a reasonable and customary mineral and reclamation sequence to minimize impacts and facilitate reclamation. In response to public comments, we have eliminated the term MATP in the final rule. Instead, we require the use of equipment, devices, and practices that will meet the performance standards in §3809.420. The economics of the practices is the operator's decision. Throughout this regulatory effort we have attempted to maintain a outcome-based philosophy in developing performance standards. We want to focus on the outcome or accomplishment the operator must achieve. These outcome-based performance standards place a minimum emphasis on how the operator must conduct operations as long as the desired outcome is met. These standards give operators the most flexibility, encourage innovation, and foster the development of low-cost solutions. In implementing the regulations BLM would review the Notice or proposed Plan of Operations to determine if it is reasonably likely to meet each outcome-based performance standard. But we would not require any specific design.

19.56 **Comment:** EPA supports BLM's intent to develop most appropriate technology and practices (MATP) for mines, especially for mining units containing hazardous or toxic materials such as, for example, cyanide ponds and heap leach pads. But MATPs are only one component of the design work that needs to be completed to ensure performance standards will be met. A complete mine plan needs to include all necessary technologies and practices to meet performance standards. As BLM develops MATPs for mines, we recommend that the development of these practices involve consultation with EPA and the states. These practices should be defined to include extraction practices, beneficiation practices, and waste management practices. There is clearly a need to develop minimum federal design and operating standards for a variety of mining units since this is the best way to assure that unit designs are installed at the beginning mine life thus avoiding retrofitting large units after the fact. The proposed regulations should also require that these guidance documents be amended every 5 years since a most appropriate or "best practice" may change over time. We note that SPA has already established best demonstrated available technology (BDAT) under the Clean Water Act (CWA) and has equivalent best practices under Resource Conservation and Recovery Act (RCRA) for

certain waste management practices. We need to work together to ensure that BLM guidance will not conflict with these existing requirements.

Response: In response to public comments, we have eliminated the term MATP in the final rule. Instead, you must use equipment, devices, and practices that will meet the performance standards in §3809.420. Throughout this regulatory effort we have attempted to maintain a outcome-based philosophy in developing performance standards. We want to focus on the outcome or accomplishment the operator must achieve. These outcome-based performance standards place a minimum emphasis on how the operator must conduct operations as long as the desired outcome is met. These standards give operators the most flexibility, encourage innovation, and foster the developing of low-cost solutions. In implementing the regulations BLM would review the Notice or proposed Plan of Operations to determine if it will meet each outcome-based performance standard. But we would not require that any specific design be used. BLM would, as it does currently, coordinate its review of operations with the authority regulating water quality to ensure that (1) the water quality standards could be met by the proposed technology and (2) there is no duplication. BLM received many comments on "best available technology and practices" (BATP) and "most appropriate technology and practices" (MATP). BATP has certain regulatory requirements in air quality and doesn't lead to innovation and development of new technology.

19.57 **Comment:** NMA objects to the assertion in the proposed rules that land use plans constitute performance standards that apply to mining operations and postmining land use comply with BLM land use plans and activity plans. The current 3809 surface management regulations issued soon after the enactment of FLPMA, however, properly contain no provisions subjecting mining and mineral exploration to land use plans. Section 202 of FLPMA authorizes the BLM land use planning process that the only way by which the land use plans can affect locatable mineral activities is through the withdrawal provisions of FLPMA. Any attempt to introduce land use planning concepts in the 3809 rules now would interfere with a mining claimant's rights under the Mining Laws and it would be contrary to BLM contemporaneous and consistent past interpretation of FLPMA. Our comments on land use planning apply to all other references to land use planning in the proposed 3809 regulations and preamble.

Response: While NMA asserts that §302 of FLPMA, with certain exceptions (including the unnecessary or undue degradation prohibition) did not amend the mining laws, we disagree that BLM's land use planning cannot be integrated with the §3809 surface management regulations without impairing rights established under the mining laws. The management guidance or prescriptions included in land use plans cannot be so stringent as to deny rights obtained under the mining laws. The performance standard in proposed final §3809.420(a) reflects that land use plan requirements must be consistent with the rights held under the Mining Law. Other processes besides land use planning, such as a withdrawal action and/or mineral contests, can be used where mining has to be excluded

to protect other resources.

19.58 **Comment:** We support the Maximum Protection definition of postmining land use. Including a defined postmining is beneficial because it gives specific direction to reclamation efforts. The "irreparable harm" component of the definition would also help design proper mitigation during mining to prevent degradation of landscape and habitat components that may support the postmining land use. Our experience has shown that some habitat components may not be replaceable if lost during mining.

Response: Postmining land use will be the same as premining land use unless BLM's land use plan specifies differently. Compliance with the standards of §3809.420 will prevent degradation of landscape and habitat components. If impacts to habitat cannot be avoided, then the habitat must be rehabilitated or mitigated. The concept of irreparable harm has been included in the definition of unnecessary and undue degradation by adding a fourth item. Unnecessary or undue degradation means conditions, activities, or practices that: (4) occur on mining claims or mill sites located after October, 21, 1976 (or on unclaimed lands) and result in substantial irreparable harm to significant scientific, cultural, or environmental resource values of the public lands, which cannot be effectively mitigated.

19.59 **Comment:** The Ground water section is actually very good. We suggest that you state in (b) (ii) (B) that earth materials that might form "acidic, toxic, or other deleterious infiltration" should be isolated from the environment. Section (b) (ii) (C) is excellent if the definition of "minimize " as provided above is adopted. But this section should specify the impacts on surface sources be prevented offsite. The section should also list streams and rivers as potential surface sources that depend on groundwater and may not be affected by the operations.

Response: In the final rule §3809.420 (b) (ii) (B) has been modified to read, "You must conduct operations to minimize the discharge of pollutants into groundwater." This was done to avoid the appearance that BLM was usurping control of water quality regulations and because this requirement is in §3809.420 (c) (3). §3809.420 (b) (ii) (C) does not specify on site or off site. §3809.420 standards apply to operations on public land but are intended to minimize impacts both on and off the public lands. The term "surface" in 3809.420 (b) (ii) (C) includes streams and rivers as potential surface sources that depend on ground water and may not be affected by the operations.

19.60 **Comment:** The objective that provides "for the reclamation of disturbed areas" should be amended to clarify that "disturbed areas" include areas that are impacted both directly by surface disturbing activities and indirectly by dewatering, contamination, spills, etc. The definition of reclamation should be amended to include a provision requiring the restoration of the natural hydrology to the extent possible. The definition of "unnecessary and undue degradation" should be amended to include disturbance to local and regional

hydrologic resources and should define degradation to include drying or contamination of spring, streams, seeps, and wetlands, both onsite and offsite due to indirect impacts of mining activities.

Response: A disturbance is anything caused by operations that BLM determines is a change from the preoperation condition of the public lands. The performance standards protect to water resources. *Reclamation* means taking measures required by this subpart after disturbance of public lands caused by operations to meet performance standards and achieve conditions required by BLM at the end of operations. The impacts to water or water-dependent resources will either be avoided or if unavoidable, then mitigated. Avoidable water resource impacts that are not avoided constitute unnecessary degradation. Unavoidable and unmitigated impacts to water or water-dependent resources constitute undue degradation.

19.61 **Comment:** A perpetual trust fund for water treatment is proposed, but the draft EIS failed to propose required guidelines for the bureaucracy, as do the published regulations. Because the trust fund is perpetual, an agency will be charged with monitoring the water quality. The agency will have costs (i.e. personnel, laboratory, office, etc.). And those costs will come out of the trust fund. If the trust fund is depleted, will the former mine operator be required to ante up more funds to cover agency costs, regardless of environmental problems?

Response: The requirement in §3809.522 (c) is to establish a trust fund or other funding mechanism available to BLM to ensure the continuation of long-term treatment to achieve water quality standards and for other long-term, postmining maintenance requirements. The funding must be adequate to provide for construction, long-term operation, maintenance, or replacement of any treatment facilities and infrastructure, for as long as the treatment and facilities are needed after mine closure. BLM may determine the need for a trust fund or other funding mechanism during Plan review or later. Such funding is needed to prevent the public from becoming responsible for costs incurred to maintain perpetual water treatment facilities. The specific operation of the trust or other funding mechanism will be determined on a case-by-case basis. No agency will be responsible for monitoring water quality. That is the responsibility of the operator. The operator will be required to maintain the trust fund or other funding mechanism sufficient to cover all needed costs for requirements in §3809.522 (c).

19.62 **Comment:** BLM has not considered the fact that a tailings pond is part of a water treatment facility or that a long-term effluent treatment facility can be used only after "source control" has failed. Likewise, requiring a failure before a tailings pond can be built. I recognize that this is not likely to be what BLM intends, but the actual words and concepts in this table, the preamble, and the proposed regulations lend themselves to such a restrictive result when there is technical litigation involving the exact regulatory language.

Response: We disagree that a long-term effluent treatment facility can be used only after source control has failed or a failure before tailing ponds can be built. BLM will review the proposed Plan of Operations, reclamation plan, and monitoring plans to ensure the performance standards will be achieved. BLM would not approve any proposals such as you suggest.

19.63 **Comment:** Examples of performance standards that could be violated due to no fault of the operator are Standards (a) (6) requiring "Reestablishing altered stream channels with sinuosity, gradient, and geometry similar to natural conditions." This may not be possible due to the geomorphology of the area where the stream is reestablished. Standards(d) (4), which requires pit waters to meet federal, state, or tribal water quality standards. By their very nature, pit waters occur in mineralized areas and are used by geologists as an exploration tool to locate mineral deposits. BLM's revised 3809 "standards" do not recognize the natural effects of mineralization on water, soils, vegetation, etc. standard (g) relating to waste rock, tailings and leach pads. The standard states that "You must locate, design, construct, operate, and reclaim" these facilities "to prevent infiltration and contamination." While this is the goal for every operation, it does not recognize real-life incidents and human error.

Response: Riparian functioning condition analysis considers the geomorphic potential of the area being reclaimed or mitigated. In response to public comments, §3809.420 (c) (7) (iii) has been changed to drop tribal standards because pits on public land will not be on tribal lands, and to clarify that the state must delegate local environmental requirements. §3809.420 (c) (7) (iii) requires water quality in pits and other water impoundments to comply with federal, state, and where delegated by the state, local government standards. Where no standards exist, you must take measures to protect wildlife, livestock, and public water supplies and users. Pit and other water impoundments are created by the operation and must be managed to avoid impacts to resources. In §3809.420 (c) (3), (4) and (5) there is no requirement "to prevent infiltration and contamination." There are, however, requirements to minimize impacts. Pit or other water impoundments are created by the operator and are therefore the operator's responsibility to ensure compliance with water quality standards. Premining monitoring will establish background conditions that establish natural levels of mineralization in soils, water, vegetation, etc.

19.64 **Comment:** The requirement to "minimize changes in water quality in preference to water supply replacement," is an improper infringement upon state water laws. If water has been allocated to a mining operations pursuant to state law, BLM has no authority (and no interest) in restricting the operator's ability to use that water as authorized. Moreover, the requirement is simply at odds with the reality of large mining operations.

Response: Section 302(b) and 303(a) of FLPMA, 43 U.S.C. 1732(b) and 1733 (a), and the Mining Law, 30 U.S.C. §22, give BLM the authority to require operators to minimize

water pollution (source control) in preference to water treatment through the review and approval of mining Plans of Operations. This review falls squarely within the actions that the Secretary of the Interior can direct to prevent unnecessary or undue degradation of the public lands. Section 303 (a) directs the Secretary to issue regulations for the "management, use and protection of the public lands...." In addition, 30 U.S.C. §22, allows the location of mining claims subject to regulation. Taken together, these statutes clearly authorize the regulation of environmental impacts of mining such as water resources. To clarify to operators, BLM, and the public which performance standards an operator must comply with when operating on the public lands, we determined that more standards would help in defining and preventing unnecessary or undue degradation. While the allocation and permitting of water use is the state's responsibility, it is clearly BLM's responsibility to minimize impacts to water resources on the lands under its jurisdiction.

19.65 **Comment:** Section 3809.420(c) (2) (i) prohibits operators from allowing drilling fluids and cuttings to flow off the drill site. Operators generally control drilling fluids and cuttings, but occasionally drilling fluids over flows off the drill site. This performance standard could be interpreted too narrowly and should be changed to prohibit the operator from allowing any discharge of drilling fluids and cuttings from entering surface or ground waters.

Response: The intent of §3809.420 (c) (2) (i) is to prevent discharge of drilling fluids and cuttings from entering surface or ground water. If an overflow occurs, mitigation may be required.

19.66 **Comment:** Proposed [section] 3809.420 (b) (3) would require an operator to avoid locating operations in riparian areas. Riparian areas are defined on page 6428 as a form of "wetland transition between permanently saturated wetlands and upland areas that exhibit vegetation or characteristics reflective of permanent surface or subsurface water influence." This definition should be expanded to include ephemeral streams and desert washes that provide important cover and forage resources and represent important movement corridors for a variety of wildlife.

Response: While we agree that ephemeral streams and desert washes are important for wildlife, BLM's definition of riparian areas has been in use since 1987 and will not be modified by this rule. The BLM definition specifically excludes "...such sites as ephemeral streams or washes that do not exhibit the presence of vegetation dependent upon free water in the soil." Protection for these areas is provided for in §3809.420 (b) (6) *Fish and wildlife*.

19.67 **Comment:** Many riparian areas, indeed probably the vast majority of those that occur in the arid West, are not in proper functioning condition (PFC) at present or were not at the inception of ongoing mining operations (BLM 1991). This proposal thus requires an operation not only to mitigate for its own impacts but also to repair accumulated adverse

impacts that occurred under BLM management before the operation began. The definition of PFC depends upon factors that may be unachievable in some fairly common circumstances. Several factors may contribute to this, such as upstream water diversions or dams, excess sediment load from outside the areas under an operator's control, and preexisting vegetation circumstances (e.g. tamarisk dominance). Field examples of circumstances such as these exist in areas where mining operations occur. Also, to achieve PFC in riparian areas that were disturbed by an operation, it would be necessary to remedy degraded conditions upstream, including in areas not affected by the operation. BLM procedures for ecological site inventory already provide a means for noting the presence of riparian areas and determining and describing their character. These procedures are properly to be applied to a site of proposed or expanded mining operations, and when so implemented ensure that riparian resources are adequately represented in baseline information. In light of the universally acknowledged water quality and biological values in riparian areas under the existing 3809 rules, NEPA review of project design, impacts, and mitigation provides sufficient, indeed superior, means for the protecting and restoring affected riparian areas, whether jurisdictional or not. To comply with the requirements of 3809.420 (b)(3), in addition to formal wetland delineation as needed for Section 404 permitting, nonwetland riparian areas would need to be mapped. This task could conveniently achieved by means of an another boundary shown on the wetland delineation map. But no procedurally clear methodology exists for delineating nonwetland riparian areas, and many technical difficulties would arise. A legitimate case could be made for imposing more BLM regulation on activities such as logging, silviculture, and ranching, which benefit from certain activity-specific Section 404 exemptions. Although the return of riparian areas not now in PFC to that condition (BLM 1991) is a laudable goal, imposing the requirement to achieve it on mining operations alone, and not on other land uses that are certainly much more responsible for present degraded conditions (specifically, grazing permittees), seems clearly to exceed the basis for the proposed rulemaking as explained in the introduction to the proposed rule (pages 6423 to 6425).

Response: BLM will consider the premining functioning condition of riparian areas affected by mining when determining needed mitigation. BLM Technical Reference TR 1737-9 (BLM 1993b) discusses the process for assessing proper functioning condition (PFC). Riparian area capability and potential are considered when making a PFC determination, and these considerations include factors such as upstream water diversions and preexisting vegetation. All public land uses must allow riparian areas to remain in or improve to proper functioning condition. This is a requirement of the Standards for Public Land or Rangeland Health, which were developed in conjunction with BLM's resource advisory councils.

19.68 **Comment:** Require that all wetlands and jurisdictional waters of the United States (p.48) be surveyed in order to allow an environmental impact statement.

Response: As part of the Plan of Operations, all wetlands and waters within the project area would be mapped and evaluated in the environmental document.

19.69 **Comment:** Section 3809.420 (b) (3) (iv). It does not make sense to reference certain federal agencies or requirements met by operators and hundreds of state and local requirements are added. The agencies and rules mentioned are no more or less important than those not mentioned.

Response: We chose to mention in §3809.420 (b) (3) (iv) the U.S. Army Corps of Engineers requirements to make a distinction between mitigation for jurisdictional and nonjurisdictional wetlands.

19.70 **Comment:** After mining operations, wetland and riparian areas should be restored to functional condition after operations or offsite replacement of 1.5 acres of in-kind habitat for every acre disturbed. We agree with BLM that the 10-year time frame for restoration of riparian-wetland habitats to functional condition may not be realistic and that many years or decades may be required for newly created riparian-wetland habitat to reach functioning condition of the habitat that was originally impacted. The Arizona Game and Fish Dept. recommends considering specific time frames and success criteria for restoring aquatic and riparian-wetland habitats to proper functioning condition. The preferred alternative should include BLM's authority to deny mining permits if these mitigation goals are not expected to be met. We would appreciate the opportunity to be involved in assessing potential impacts to aquatic resources and developing mitigation. The preferred alternative should include the provision that BLM can deny mining proposals if the operator predicts that the operation would not meet the time or replacement requirement for restoring proper functioning condition. We recommend that BLM coordinate with the state wildlife agencies to determine mitigation for addressing adverse impacts to fish and wildlife in wetland and riparian habitats.

Response: While the 1.5:1 restoration ratio for riparian areas is a good rule-of-thumb in some cases, BLM will determine riparian mitigation on a site-by-site, case-specific basis. Specific time frames for restoring riparian-wetland habitats to proper functioning condition will be in the reclamation plan. §3809.411 (c) (3) provides that BLM would disapprove or withhold approval of a Plan of Operations if it would result in unnecessary or undue degradation of public lands. This disapproval would be triggered if the operator would not meet a suitable time frame for restoring aquatic and riparian-habitat to proper functioning condition.

19.71 **Comment:** The terms "possible" and "feasible" need to be defined for use in the riparian performance standard [3809.420 (b) (3)]. For example, the preamble to the proposed rule states that, while ore recovery activities might have to be located in a wetland due to their site specific nature, operators would be expected to avoid locating other activities in wetlands. The rule should specify what activities should be avoided in wetlands and

riparian areas. The list of proper functioning condition characteristics at 3809.420 (b) (3) (ii) is not true of all natural riparian areas. Therefore, it may not be equitable to task all operators to return riparian areas using these standards. Furthermore, techniques for such restoration are not well developed. We would like to explore a more appropriate approach with BLM during the preparation of the final EIS. EPA has serious concerns about the long-term loss of these resources and recommends that BLM require a minimum compensation ratio of at least 1:1 for losses of waters of the U.S. and/ or aquatic habitat, as well as wetland and riparian losses, even those that are permitted by the U.S. Army Corps of Engineers pursuant to Clean Water Act Section 404. In addition, while we support a more protective alternative than the proposed alternative for wetland and riparian resources, we do not believe that Alternative 4 is protective enough. We believe that restoration should be conducted following closure. We recommend that immediate compensation be required for all losses of wetland and riparian areas that cannot be avoided, even for areas that are intended to be restored following closure. Any loss of decades of function should be mitigated and at a much higher ratio than the 1.5:1 provided in Alternative 4. If no temporal compensation is included in a given project, we would recommend that the off-site compensation ratio be on the order to 10:1 or higher, depending on the amount of functional time lost.

Response: The terms "possible" and "feasible" used in the riparian performance standard pertain to mitigation. §3809.420 (b) (3) establishes a hierarchy of (1) avoiding locating in (where possible), (2) minimizing impacts to, and (3) mitigating damage to wetlands and riparian areas. If it were not feasible to return disturbed wetlands and riparian areas to proper functioning condition, mitigation would be required. In response to comments, we have defined the use of the word feasible in §3809.420 (b) (3) to include economic and technical feasibility. This provision would minimize to the extent economically and technically feasible, disturbance in these areas and promote restoration of unavoidable disturbance. Access or roads, processing, and waste rock dumps or waste handling are examples of the type of activity that BLM would expect to avoid being located in wetlands and riparian areas. The list of physical factors are BLM's definition of when a riparian area is in proper functioning condition. BLM's experience has been that when these benefits are present, applicable to a particular area, the riparian area is in proper functioning condition (PFC). EPA at the regional level has continuously supported and used BLM's definition of PFC. Time frames for restoring riparian-wetland habitats to proper functioning condition will be in the reclamation plan. EPA jurisdiction is generally restricted to National Environmental Policy Act (NEPA) compliance and air and water quality. Decisions on riparian mitigation are best left to the local BLM field office to establish on a case-by-case basis.

19.72 **Comment:** Revise .420 (b) (3) to make it clear that when BLM requires project facilities to be located in a more costly location, that the owner/operator will be given financial credits not less than the cost of relocation and the net public benefit gained from the relocation. Relocation should not be required unless BLM can document a net public

benefit and the amount of the benefit. Relocating a project component may protect one resource, such as a non-jurisdictional wetlands, but have significant impacts to scenic resources because the component is now more visible because different wildlife uses are displaced to the new locations.

Response: It would be inappropriate to give financial credit to an owner/operator making a profit from public land resources for avoiding impacts by locating facilities in a more costly location. Facility location costs are the cost of conducting mining operations on public land. The operator can always chose not to conduct the mining operation if it is too costly.

19.73 **Comment:** Will BLM consider a project's unnecessary, undue degradation plan if the project proves that the riparian areas are improved after the project? This would meet the requirement of a no net loss.

Response: If an operator's Plan of Operations can show that a riparian area will improve after reclamation, then the project would not contribute to unnecessary or undue degradation, and location in a riparian area would not be a reason to deny the approval of the Plan.

19.74 **Comment:** Review the term "properly functioning condition" as used in .420(b)(3)(ii) to assure that BLM and the Forest Service are using the same definition and include that definition here.

Response: The United State Forest Service (USFS) is not part of this rulemaking. But the USFS definition and process for determining proper functioning condition of riparian areas is the same as BLM's and is in the proposed final regulations.

19.75 **Comment:** (3) Wetland and Riparian Areas. (i) You must avoid locating operation in wetlands and riparian areas where possible, minimize impacts on wetlands and riparian areas that your operations cannot avoid, and mitigate damage to wetlands and riparian areas that your operations impact. Proposed Revision: (3) Wetland and Riparian Areas. All mining operations shall be conducted in such a manner as to ensure the proper functioning condition of riparian and wetland areas on public lands. BLM's proposal on the treatment of wetland and riparian habitats is wholly inconsistent with the land use plans adopted in every state in the western U.S. through the revisions that were made in the past 18 months. BLM gives no justification for treating the mining industry to a different standard for public land health than applies to all other public land uses. This section must be revised to ensure consistency with existing land use plan standards in all western states.

Response: Some commenters on the proposed rule expressed concern or confusion about how the performance standards would mesh with BLM's standards and guidelines for

grazing administration (43CFR part 4100, subpart 4180). The rangeland health standards are expressions of physical and biological conditions or degree of function required of healthy sustainable lands. Operations under this subpart would have to comply with the performance standards of §3809.420. These performance standards will ensure that rangeland health standards can be met. To the extent that the standards and guidelines are incorporated into BLM land use plans, they will be reflected in the Plans of Operations that BLM approves under this subpart. In its role as manager of the public lands over the long term, BLM will assess lands affected by operations for progress towards achieving rangeland health after reclamation is completed.

19.76 **Comment:** 3809.420 (b) (4) (ii) requires, where feasible, the direct transport of topsoil from its original location to the point of reclamation without intermediate stockpiling. I can't imagine many opportunities to direct transport topsoil without stockpiling. Obviously, it is in the miner's best interest to do so to minimize the handling of materials, but the practicality of the requirement leaves a lot to be desired.

Response: In response to public comments, §3809.420 (b) (4) (ii) has been modified to describe feasibility. This standard now states, "To preserve soil viability and promote concurrent reclamation, you must directly transport topsoil from its original location to the point of reclamation without intermediate stockpiling, where economically and technically feasible." If the operator can demonstrate to BLM that this requirement isn't economically or technically feasible, then it will not be required.

19.77 **Comment:** 3809.420 (c) (4) provides performance standards for leaching operations and impoundments. Section 3809.420 (c) (4) (v) requires the operator to exclude "access by the public, wildlife or livestock to solution containment and transfer structures that contain lethal levels of cyanide or other solutions." This language should be modified to state "detoxify or take other measures to protect the environment."

Response: These facilities are not usually detoxified until closure and final reclamation. If the operator chooses to detoxify the facilities, there would be no need to exclude access to solution containment and transfer structures.

19.78 **Comment:** The regulations should have flexibility to use alternative growth media if it is shown to be better than existing surface soils in the area.

Response: §3809.420 (b) (4) (i) provides for "other suitable growth material" and allows for the use of alternative growth media if it is shown to be better than existing surface soils.

19.79 **Comment:** The standards for reclamation in the new 3809 rule must require that a mining operation restore the soil profile and native vegetation.

Response: Restoration of a soil profile can take hundreds or thousands of years. The §3809.420 performance standards require the use of native species in revegetation to the extent technically feasible.

19.80 **Comment:** Section 3809.420 (b) (5) (i) (B) (iv) requires the operator to achieve revegetation success over the time frame approved by BLM. This may not be a problem if the time frame is acceptable to the operator and reasonable, but this should be noted in the performance standard.

Response: BLM and the operator must agree upon the time frame for successful revegetation before BLM approves the reclamation plan portion of a Plan of Operations.

19.81 **Comment:** Native plants should be used in reclamation, and land should be recontoured to premining topography to the greatest extent possible.

Response: §3809.420 (b) (5) (B) (ii) of the performance standards require the use of native species to the extent technically feasible in revegetation. Recontouring is required by §3809.420 (c) (6) (ii) "You must recontour all areas to blend with pre-mining, natural topography to the extent technically and economically feasible..."

19.82 **Comment:** Section 5(i)(B) should be deleted. To ensure that the public lands are restored to a productive vegetation cover for all public land uses, a diverse cover of native vegetation is needed. All too often, mining companies will plant introduced species, such as crested wheatgrass, or worse–Kentucky fescue–and argue that this cover achieves a postmining land use of grazing lands. Unfortunately, both these grasses are nonnative, have little wildlife value, and will quickly become rank to the point that they are not used by livestock or wildlife. Only native vegetation cover will achieve the postmining land uses.

Response: We think §3809.420 (b) (5) (i) (A) comparable in both diversity and density to preexisting natural vegetation of the surrounding area, or (B) compatible with the approved BLM land use plan or activity plan, gives needed flexibility to provide for vegetation that is desired but different from premining conditions. But in most instances revegetation will mimic premining vegetation. The proposed final regulations also require the use of native species to the extent technically feasible.

19.83 **Comment:** Section 5(v) should be deleted. A mining company cannot claim to meet its obligations to prevent unnecessary or undue degradation of the public lands if it cannot show that it will revegetate the lands affected by mining and achieve a postmining land use. Otherwise, the public is left with a moonscape of erosion control ditches that support no uses or values and could produce long-term liabilities for the public should erosion control structures fail.

Response: Only where operators have demonstrated to BLM that revegetation is not achievable can they use other techniques to minimize erosion and stabilize the project area. These techniques are also subject to BLM approval.

19.84 **Comment:** 3809.420 (b) (5) contains the performance standards for revegetation. In 3809.420 (b) (5) (v) the word "minimize" should be used rather than "prevent" so the sentence would read, "...you must use other techniques to minimize erosion..." It may not always be necessary technically or economically feasible to prevent erosion, and prevention of erosion clearly exceeds the unnecessary or undue degradation standards under FLPMA.

Response: In response to comments, we have change §3809.420 (b) (5) (v), which now reads "Where you demonstrate revegetation is not achievable under this paragraph, you must use other techniques to minimize erosion and stabilize the project area, subject to BLM approval."

19.85 **Comment:** We recommend an acknowledgment that if revegetation standards are not obtainable, the operator may use coarse and durable rock armoring to prevent erosion and stabilize a site.

Response: In response to comments like yours, we have made your recommended change. Proposed final regulation §3809.420 (b) (5) (v) now reads "Where you demonstrate revegetation is not achievable under this paragraph, you must use other techniques to minimize erosion and stabilize the project area, subject to BLM approval." Subject to local BLM field office approval, coarse and durable rock armoring may be suitable to prevent erosion and stabilize a site if revegetation is not achievable.

19.86 **Comment:** Section 3809.420 Revegetation. Alaska Department of Natural Resources' Division of Mining and Water Management has considerable experience in reviewing revegetation plans for their effect on diversity and density of vegetation. In general, duplicating the diversity and density in the surrounding area is not necessarily desirable. The vegetation should be suitable for the postmining land use that in Alaska is usually wildlife habitat. The revegetation should not detract from the diversity and density in the surrounding region, but focusing on recreating preexisting natural vegetation patterns in many areas of Alaska is not desirable, even for fish and wildlife.

Response: §3809.420 (b) (5) (i) provides for revegetation either to be (A) compatible in both diversity and density to preexisting natural vegetation of the surrounding area, or (B) compatible with the approved BLM land use plan or activity plan. These provisions could allow for revegetation to be suitable for wildlife habitat.

19.87 **Comment:** The requirement to "prevent and control" noxious weed infestations on reclaimed areas may be impossible if adjacent private, federal, or state lands have been

previously infested.

Response: We have made your recommended change to §3809.420 (5) (ii). It now reads "Take all reasonable steps to minimize the introduction of noxious weeds and to limit any existing infestations."

19.88 **Comment:** Proposed [section] 3809.420 (b) (5) would incorporate and expand upon the revegetation requirement in the existing regulations. This section should also include success criteria to help ensure completion of specific reclamation goals.

Response: Each specific reclamation plan should establish success criteria for revegetation beyond establishing a stable, long-lasting, self-sustaining vegetation cover that considering successional stages will result in a cover that (A) is compatible in both diversity and density to preexisting natural vegetation of the surrounding area or (B) is compatible with the approved BLM land use plan or activity plan and (iv) will achieve success over the time frame approved by BLM.

19.89 **Comment:** The requirement that operators control existing infestations of noxious weeds is really going too far. This is not part of an operator's responsibility, and control could be attained with a gallon of herbicide (no surface disturbance?) or scarifying with a D-9. Neither of these is a desirable solution. Managing to prevent introduction, however, is reasonable and responsible.

Response: We think that taking reasonable steps to minimize the introduction of noxious weeds and limit existing infestations is a reasonable requirement for operators on public lands.

19.90 **Comment:** BLM should retain its current revegetation requirements and achieve its goals through individual project review and ecosystem-appropriate requirements.

Response: After reviewing the existing §3809 regulations, we determined that more standards would help both BLM and operators in defining and preventing unnecessary or undue degradation. More specific revegetation standards help clarify BLM's expectations of operators and facilitate the reclaiming of public lands.

19.91 **Comment:** Section 3809.420 (b) (5). In determining the feasibility of using native species in revegetation, we must recognize that native species often are not the most effective for erosion control. We must consider the short- and long-term objectives of revegetation. Native species may be suitable for longer-term objectives (diversity, native species values, etc.) after the immediate objectives of erosion control and stabilization have been achieved.

Response: We recognize this point in §3809.420 (b) (5) (B) (iii) and has added the

modifier "technically" to the word feasible so it now reads, "Use native species to the extent technically feasible." Proposed final §3809.420 (b) (5) (B) (v) also recognizes this point: "Where you demonstrate revegetation is not achievable under this paragraph, you must use other techniques to minimize erosion and stabilize the project area, subject to BLM approval."

19.92 **Comment:** The Fish and Wildlife section, (6) (ii), should require that the mining proponent take "any" necessary measure to protect threatened or endangered (T&E) species. "Take" of a T&E species is not acceptable.

Response: In response to your comment, we have modified §3809.420 (b) (6) (ii). It now reads, "You must take any necessary measures to protect threatened or endangered species and their habitat as required by the Endangered Species Act." Taking of a threatened or endangered species on public lands is an issue decided in consultation with the U.S. Fish and Wildlife Service.

19.93 **Comment:** Appendix B: Proposed 3809 regulations, page A-47. Under item (6) fish and wildlife, compliance with the Migratory Bird Treaty Act should be mentioned. Fish and wildlife habitat should be included under subpart (l)of this section.

Response: Although the Migratory Bird Treaty Act is important and operators must comply with this law, we chose not to include all laws and requirements in the proposed final regulations for reasons of brevity. §3809.415 requires operators to prevent unnecessary or undue degradation of the public land by complying with...other federal and state laws for environmental protection. This requirement includes compliance with the Migratory Bird Treaty Act.

19.94 **Comment:** The proposed requirement to "Take any necessary action to minimize adverse effects" on BLM-defined special status species also cannot preclude mining operations. Given the interplay with the proposed definition of "minimize," BLM should clarify that the scope of this requirement in 3809.420(B)(6)(iii) cannot preclude mining.

Response: Special status species include threatened or endangered species. It is conceivable but not likely that an unmitigatable impact to a threatened or endangered species could preclude a mining operation. In most situations operators can mitigate impacts.

19.95 **Comment:** 3809.420 (b) (6) contains the performance standards for fish and wildlife that exceed BLM's authority. If operations generally have to prevent unnecessary or undue degradation of wildlife habitat, they need not rehabilitate such habitats as well. If BLM persists with this requirement, this provision must be modified by adding the phrase "to the extent feasible" to incorporate some flexibility.

Response: Section 302(b) and 303(a) of FLPMA, 43 U.S.C. 1732(b) and 1733 (a), and the Mining Law, 30 U.S.C. §22, give BLM the authority to require mitigation. Mitigation measures fall squarely within the actions that the Secretary of the Interior can direct to prevent unnecessary or undue degradation of the public lands. An impact that can be but is not mitigated is clearly unnecessary. Section 303 (a) directs the Secretary to issue regulations for the "management, use and protection of the public lands...." In addition, 30 U.S.C. §22, allows the location of mining claims subject to regulation. Taken together, these statutes clearly authorize the regulation of the environmental impacts of mining such as mitigation. It is unnecessary to affect fish and wildlife if the impact can be avoided. If the impact cannot be avoided, then it must be rehabilitated. If it cannot be fully rehabilitated, then the impact must be mitigated. If the unavoidable impact is not mitigated, then it is undue degradation.

19.96 **Comment:** BLM has not said why the existing grazing capacity index for the project area before the proposed mining operation is not satisfactory for establishing a revegetation standard for mine reclamation.

Response: If BLM determines that the preoperation existing grazing capacity can achieve the §3809.420 (5) revegetation standards, the grazing capacity may be used to achieve proper revegetation.

19.97 **Comment:** I think most of the issues have been addressed here, except one that's never been looked at on your side. It's the public's demand that reclaiming and revegetation be done. It should not be a burden upon the miner to do it without compensation. Miners should be compensated in some way when they do this reclamation and all this extra work that is a financial burden to them.

Response: Since operators are responsible for the disturbance and are generating revenue from the extraction of publically owned locatable minerals, they are responsible for reclaiming the disturbance caused by their operations. The requirement of reclamation and revegetation of public lands affected by mining is part of the cost of conducting operations on public lands. If operators do not chose to meet these standards, then BLM will not approve their operations.

19.98 **Comment:** 3809.420 (b) (7) (i) What constitutional or legislative authority gives BLM the decision making authority for fossils?

Response: BLM's paleontological authority comes from several sources. (1) the Federal Land Policy and Management Act of 1976 (P.L. 94-579) (FLPMA) requires that the public lands be managed in a manner that protects the "...quality of scientific..." and other values. FLPMA also requires that public lands be inventoried and provides that permits may be required for the use, occupancy, and development of the public lands. (2) The National Environmental Policy Act of 1969 (P.L.91-190) requires that "important historic,

cultural, and natural aspects of our natural heritage" be protected, and that "a systematic, interdisciplinary approach that will insure the integrated use of the natural and social sciences... in planning and decision making..." be followed. (3) Title 43 CFR, Subpart 8365 addresses the collection of invertebrate fossils and, by administrative extension, fossil plants. (4) Title 43 CFR, Subpart 3622 addresses the free use collection of petrified wood as a mineral material for noncommercial purposes. (5) Title 43 CFR Subpart 3621 addresses collection of petrified wood for specimens exceeding 250 pounds in weight. (6) Title 43 CFR Subpart 3610 addresses the sale of petrified wood as a mineral material for commercial purposes. (7) Title 43 CFR Subpart 8200 addresses procedures and practices for managing lands that have such outstanding natural history values as fossils, which are of scientific interest. (8) Title 43 CFR Subpart 8365.1-5 addresses the willful disturbance, removal, and destruction of scientific resources or natural objects, and 8360.0-7 states the penalties for such violations. (9) 18 USC Section 6421 addresses the unauthorized collection of fossils as a type of government property. (10) Secretarial order 3104 grants BLM the authority to issue palentological resource use permits for lands under its jurisdiction. (11) The Federal Cave Resources Protection Act of 1988 (P.L. 100-691) and Title 43 CFR Subpart 37 address protection of significant caves and cave resources including palentological resources.

19.99 **Comment:** [3809.420] I support deletion of a requirement for wildlife "enhancement."

Response: In an earlier draft of the 3809 regulations we considered requiring operators to "enhance" wildlife habitat during reclamation. We decided not to propose this requirement because of the subjectivity involved in determining what is an enhancement and because it can be inequitable or impractical to require operators to improve habitat values above predisturbance conditions. BLM requires operators to minimize disturbances and adverse impacts on fish, wildlife, and related environmental values and to rehabilitate or mitigate fisheries and wildlife habitat affected by operations.

19.100 **Comment:** The requirement in proposed 3809.420 (b) (6) (iv) to "rehabilitate" fisheries and wildlife habitat should be clarified to conform with the practices relied on under the existing regulations. Specifically, the reclamation plan requirements should consider the feasibility of rehabilitation or postmining land use.

Response: The proposed final regulations consider the feasibility of fish and wildlife habitat rehabilitation. If an operator cannot rehabilitate fisheries and wildlife habitat affected by its operation, the impacts must be mitigated.

19.101 **Comment:** The language in the proposed 3809 regulation raises concerns beyond those raised in Barrick's 1999 comments because the Surface Management Surface Mining Control and Reclamation Act (SMCRA) language and regulation was recently interpreted by a federal district court in Bragg. Robertson, 72 F. Supp. 2d 642 (W. Va. 1999). In that decision, the district court interpreted the Office of

Surface Mining (OSM) regulation to bar OSM approval of "mountain top mining" in West Virginia. Barrick is concerned that, because the proposed fish and wildlife performance standard is similar to the SMCRA statutory standard, that future interpretation or application of the proposed performance standard could have consequences unintended by BLM, as the OSM regulation has been interpreted in a way that was unintended by OSM. The National Resource Council (NRC) committee considered whether current regulations are adequate to protect environmental values, including fish and wildlife, and recommended no changes to the current regulations. On the basis of the NRC report (NRC 1999) and its earlier comments, Barrick recommends that the proposed revisions to the fish and wildlife performance standard be deleted from the proposed rulemaking.

Response: BLM cannot avoid the protection of fish and wildlife resources it is responsible for managing due to fear that its regulations might be misinterpreted. The NRC study did not say no additional fish and wildlife protection was warranted above BLM's previous regulations. The study did say that "BLM and the Forest Service have public responsibilities that go beyond those of the state regulatory agencies seeking to protect specific environmental media. The federal agencies as land managers on the public's behalf stand in a different relationship to the land and its resources than simply as regulators of impacts. Federal land managers have a mandate for long-term productivity of the land, protection of an array of uses and potential future uses , and the management of the federal estate for diverse objectives."

19.102 **Comment:** Protection of Cultural, Paleontological, and Cave Resource. We prefer Alternative 1. Alternative 3 would allow BLM to determine who would bear the costs and would be detrimental to any of our wonderful resources. People would have to consider the financial impacts before deciding to report something they found, which would prove to be a deterrent rather than an incentive.

Response: While your scenario is a possibility, the operator would be placing the entire operation at risk. If found to be in violation of this performance standards, the operation would be contributing to unnecessary and undue degradation and subject to BLM's revoking the Plan of Operations and/or enforcement actions including criminal penalties.

19.103 **Comment:** BLM has not stated its statutory authority to arbitrarily and capriciously shift the cost of cultural resource recovery to the owner/operator or that this concept is being applied to all other users of the public lands. BLM has not said whether such information may be described by the owner/operator as confidential under the federal mining laws and regulations because BLM asserts that the reason for shifting the cost burden is solely for the benefit of the owner/operator.

Response: Section 304(b) of FLPMA, 43 U.S.C. 1734(b) is the authority for requiring operators to bear the costs of cultural resource recovery. BLM believes that since operators are responsible for the disturbance and are generating revenue from the extraction or publicly owned locatable minerals, they receive a benefit from the investigation and recovery (the ability to continue to operate) and thus generally should be responsible for the costs as a cost of doing business on public lands. If BLM incurs costs from the investigation and recovery of these resources, it will recover these costs from operators on a case-by-case basis after evaluating the factors set forth in section 304(b) of FLPMA.

19.104 **Comment:** Revise .420 (b) (7) to retain the existing time frame for suspension of a mining operation. This is yet another example of the failure of the proposed regulations to properly evaluate the impact to the owner/operator simply because BLM does not get around to it or because the appropriate cultural specialists is on vacation.

Response: The proposed final rule at §3809.420 (b) (7) (ii) would change the time frame for action on cultural, paleontological, and cave resources that are discovered after beginning operations from a mandatory 10 working days to 30 calendar days, unless otherwise agreed to by the operator and BLM or otherwise provided by law. The time frame previously was not adequate for site investigation, data recovery, and consultation required with state and federal cultural resource agencies or with interested parties. We decided not to propose an open-ended suspension of operations until investigation and data recovery are complete because of the possible adverse impacts an indefinite suspension could have on an operator.

19.105 **Comment:** Having miners pay for investigation, recovery, and preservation of resources or antiquities discovered during mining would be OK if they could keep what is discovered. Otherwise the proposal is ludicrous and downright punitive to a small miner.

Response: Antiquities discovered on public land remain the property of the Federal Government and are safeguarded by a variety of federal laws that protect and preserve such material for the benefit of the American people. We believe that because operators are responsible for the disturbance and are generating revenue from extracting publicly owned locatable minerals, they receive a benefit from the investigation and recovery (the ability to continue to operate) and, thus generally should be responsible for the costs as a cost of doing business on public lands. If it incurs costs for investigating and recovering these resources, BLM will recover the costs from the operator on a case-by-case basis, after an evaluation of the factors set forth in section 304(b) of the Federal Land Policy and Management Act.

19.106 **Comment:** Consider lands where mining should not take place at all to protect

other natural, historical, or cultural resource values for present and future generations.

Response: In response to comments like yours, we have added a fourth item to the definition of unnecessary and undue degradation. It reads Unnecessary or undue degradation means conditions, activities, or practices that: (4) occur on mining claims or mill sites located after October 21, 1976 (or on unclaimed lands) and result in substantial irreparable harm to significant scientific, cultural, or environmental resource values of the public lands, which cannot be effectively mitigated.

19.107 **Comment:** Entry roads that drain, erode, and pollute ARE NOT ACCEPTABLE!

Response: We think that the following addresses your concern: "§3809.420 (c) (1) *Roads and structures*. (i) You must design, construct, and maintain roads and structures to control or prevent erosion, siltation, and air pollution and minimize impacts to resources."

19.108 **Comment:** (I) Revise .420(c)(1) by substituting "unnecessary or undue degradation" for "minimize."

Response: In response to comments, we have modified §3809.420 (c) (1) *Roads and structures* (i) to read "You must design, construct, and maintain roads and structures to control or minimize erosion, siltation, and air pollution and minimize impacts to resources." We replaced the word "prevent" with "minimize" because it isn't always possible to prevent erosion. It would not make sense to replace "unnecessary or undue degradation" for minimize.

19.109 **Comment:** Commenters see no benefit to the public lands from "stabilizing" mine buildings and other structures. All these structures, as well as roads, should be removed from the areas affected by the mining operation as part of reclamation.

Response: Proposed final §3809.420 (c) *Operational performance standards* (1) *Roads and structures. (i).* Refers to performance standards an operator must comply while conducting operations. §3809.420 (c) *Operational performance standards* (1) *Roads and structures.* (iv) Requires "You must remove and reclaim roads and structures according to BLM land-use plans and activity plans, unless retention is approved by BLM."

19.110 **Comment:** [3809.420] (c) (10) (i) Add safe storage and handling of chemicals to this section. (C) (8) (i) Add county laws to the list of laws and requirements for solid waste. There is a least one county in Nevada that has had the septic and landfill programs delegated down to it from the state. If septic systems and landfill programs are more appropriately discussed in another portion of 3809.420, then add county laws to the list of applicable agencies.

Response: Safe storage and handling of chemicals are addressed in §3809.420 (c) (3) (i). We have added county laws to §3809.420 (c) (8) (i), which now reads, "You must comply with applicable Federal, State and where delegated by the state, local government standards for the disposal of solid waste, including regulations issued under the Solid Waste Disposal Act, as amended by the Resource Conservation and recovery Act (42 U.S.C. 6901 *et seq*.)."

19.111 **Comment:** PREVENT ACID LAKES AND STREAMS: BLM should specify guidelines for identifying and managing potentially acid-generating material. The best guidelines for this are those of the BC Acid Mine Drainage Task Force.

Response: Standards for identifying and managing potentially acid-generating material are addressed in §3809.420 (c) (3) *Acid-forming, toxic, or other deleterious materials.* This section incorporates into regulation BLM policy on acid rock drainage. We have found these requirements effective in recognizing and managing potentially acid-generating material.

19.112 **Comment:** Standards for water quality and prevention of acid mine drainage are much better specified by Alternative 4. In addition, we believe that the following statement in the discussion of Alternative 4 is highly important and must be in any statement of mining regulations: "BLM could set criteria to determine if deposits are unsuitable for mining because of acid-forming and acid-neutralizing mineral content, climate, and control technologies. Mining of materials exceeding these criteria would not be approved." In short, we believe that the regulations should clearly set forth BLM's authority to deny approval of mining at any site where the risks of undue or unnecessary environmental degradation are great.

Response: Standards for recognizing and managing potentially acid-generating material are addressed in §3809.420 (c) (3) *Acid-forming, toxic, or other deleterious materials.* This section incorporates into regulation BLM's policy on acid rock drainage. We have found these requirements highly effective in identifying and managing potentially acid-generating material. In response to comments like yours, BLM has added a fourth item to the definition of unnecessary and undue degradation. It reads, "Unnecessary or undue degradation means conditions, activities, or practices that: (4) occur on mining claims or mill sites located after October 21, 1976 (or on unclaimed lands) and result in substantial irreparable harm to significant scientific, cultural, or environmental resource values of the public lands, which cannot be effectively mitigated."

19.113 **Comment:** Arizona's authority to enforce these performance standards is granted by the Aquifer Protection Permit (APP) program, namely under best available demonstrated control technology (BADCT). APP provides equal, and in many cases, better performance standards to address acid rock and acid mine drainage,

erosion prevention (run on and runoff controls), leaching operations and impoundments, waste rock, tailings stability, etc., as described in this subpart. The *Federal Register* declares that states are better positioned to develop ground water standards within their own borders, which Arizona did in 1986. But Arizona also developed stringent performance standards under BADCT, which includes "standard engineering practices." The APP rules became law in 1989. Arizona's APP program usually does not require removal of acid forming, toxic or deleterious materials from the site. It does require that discharge of these substances cease before closure/postclosure is complete (e.g. clean closure).

Response: We recognize that states may apply their laws to operations on public lands. If state laws or regulations were to conflict with this subpart, an operator would have to follow the requirements of this subpart. If state laws or regulations require a higher standard of protection for public lands than this subpart provides, then there would be no conflict.

19.114 **Comment:** Will waste rock dumps be required to be lined?

Response: No, but §3809.420 (c) (5) *Waste rock, tailings, and leach pads* requires that "You must locate, design, construct operate and reclaim waste rock, tailings, and leach pads to minimize infiltration and contamination of surface water and groundwater; achieve stability; and, to the extent feasible, blend with pre-mining, natural topography." This requirement may necessitate lining of waste rock dumps in certain situations.

19.115 **Comment:** Recommend a policy of no landfills (at mine sites) unless fully lined industrial class landfills with ground water monitoring. A better option is to allow transfer stations only and that all mining-related inert construction debris, liners, building foundations, piping, tanks, (test sludges for TCLP), etc. be removed from the site upon closure. If landfills are allowed, then financial assurances under 40 CFR 258 should apply. It could be appropriate to include landfills under bonds to avoid duplication and confusion of stakeholders.

Response: Your concern is addressed in §3809.420 (c) (8) *Solid Waste* "You must comply with applicable federal, state, and where delegated by the state, local government standards for the disposing of solid waste, including regulations issued under the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (42 U.S.C. 6901 *et seq*.)."

19.116 **Comment:** Waste rock dumps should always blend with premining natural topography. We recommend removing the phrase "to the extent feasible" from (c) (5). Including that phrase allows mining companies to plead poverty rather than adequately shape and locate their dumps. The same comment applies to (c) (6) (ii). Section C requires the proponent to "manage excavations and other

disturbances to prevent or control the discharge of pollutants into surface water" (b) (I) (c)). This means that waste rock dumps may not be built in drainages. It is not a question of whether, but when, seepage through the dumps will result in poor quality drainage. Sequencing of operations is an important tool in avoiding unnecessary and undue degradation. Often, a company can dispose of waste rock by backfilling pits as development proceeds. The regulations require only that companies follow a "reasonable and customary mineral exploration, development, mining, and reclamation sequence. The regulations should be revised to require that sequences be selected to minimize impacts and facilitate reclamation. Description should also include plans for ongoing testing of waste rock and stripping material to assure the separation of potential acid-generating materials ((2) (iv)).

Response: §3809.420 (c) (5) *Waste Rock, tailings and leach pads.* "You must locate, design, construct, operate, and reclaim waste rock, tailings, and leach pads to minimize infiltration and contamination of surface water and groundwater; achieve stability; and, to the extent economically and technically feasible, blend with pre-mining, natural topography." This requirement may necessitate lining of waste rock dumps in certain situations to prevent contamination of surface and ground water. §3809.420 (a) (2) *Sequence of operations* has been changed to incorporate this concern: "You must avoid unnecessary or undue impacts by following a reasonable and customary mineral exploration, development, mining and reclamation sequence to minimize impacts and facilitate reclamation." §3809.420 (c) (3) *Acid-forming, toxic, or other deleterious materials.* requires "You must incorporate identification, handling, and placement of potentially acid-forming, toxic or other deleterious materials into your operations, facility design, reclamation, and environmental monitoring programs to minimize the formation and impacts of acidic, alkaline, metal-bearing, or other deleterious leachate, including the following:..." This section addresses testing of waste rock and stripping material to assure separation of potentially acid-generating materials.

19.117 **Comment:** Acid-forming, toxic, or other deleterious materials. These provisions duplicate the water quality provisions and would directly interfere with current mineral recovery operations, particularly leaching operations, which are designed to use and generate acid and other leaching materials.

Response: We have removed the duplication by eliminating from the proposed rule §3809.420 (b) (2) (i) (B) You must handle earth materials and water in a manner that minimizes the formation of acidic, toxic, or other deleterious pollutants of surface water. §3809.420 (b) (2) (ii) B now reads, "You must conduct operations to minimize the discharge of pollutants into groundwater." §3809.420 (c) (3) *Acid-forming, toxic, or other deleterious materials.* Incorporates existing BLM policy on acid rock drainage into the §3809 regulations. It has not been BLM's experience that this provision duplicates water quality provisions or directly interferes with current mineral recovery operations.

19.118 **Comment:** Acid-Generation Potential. Although BLM's proposed performance standard here echoes the Acid Mine Drainage Policy and is not surprising, BLM did not even bother to mention or assess the state programs for addressing acid-generating potential. PMP recognizes that BLM has a legitimate interest in assuring that acid generation is prevented or controlled because of the long-term impacts on surface resources. This section–operational performance standards–is a more suitable place for provisions on acid-generation potential than is the environmental performance standard section, where the proposed requirements clearly duplicate Clean Water Act requirements.

Response: We have removed the duplication by eliminating from the proposed rule §3809.420 (b) (2) (i) (B) You must handle earth materials and water in a manner that minimizes the formation of acidic, toxic, or other deleterious pollutants of surface water. §3809.420 (b) (2) (ii) (B) now reads "You must conduct operations to minimize the discharge of pollutants into groundwater." The performance standards for *Acid-forming, toxic or other deleterious materials* is in §3809.420 (c) (3) in the operational performance standards.

19.119 **Comment:** Historic mining districts and mine sites are almost inevitably remined as new technologies evolve and global economics change. In most cases, backfilling precludes future access to materials that may become economically minable under these changing conditions. Backfilling not only results in the loss of these future resources, but displaces fulfillment of the demand to other areas not previously disturbed. To the extent that backfilling involves the return of stockpiled waste materials also doubles the consumption of fuel, the dust emissions, the exposure to erosion, and the impacts of loading, hauling, dumping, contouring, and reclaiming the same material twice. In addition, the doubling of the mining costs diverts capital from other activities such as the initiation of new projects elsewhere, thus eliminating more jobs and other public benefits.

Response: The presumption for pit backfilling has been removed. §3809.420 (c) (7) now reads *Pit reclamation.* (i) Based upon the site specific review of §3809.401 (b) (3) (iii), and environmental analysis of the plan of operations, BLM may determine the amount of pit backfilling required, taking into consideration economic, environmental and safety concerns. (ii) You must apply mitigating measures to minimize the impacts created by any pits or other disturbances that are not completely backfilled. (iii) Water quality in pits and other water impoundments must comply with applicable Federal, State and where appropriate local government standards. Where no standards exist, you must take measures to protect wildlife, domestic livestock, and public water supplies and users. BLM will review the information required in §3809.401 (b) (3) (iii) Mine reclamation, including information on the feasibility of pit backfilling that details economic, environmental and safety concerns; to make its determination regarding the amount of backfilling required.

19.120 **Comment:** The requirement to blend with premining topography is awkward and not achievable. How does an operator blend with topography that doesn't exist anymore? A better way to state this reclamation standard would be to require "blending with surrounding natural topography to the extent practicable."

Response: §3809.420 (c) (6) (ii) requires that you recontour all areas to blend with premining, natural topography to the extent technically and economically feasible. You may temporarily retain a highwall or other mine workings in a stable condition to preserve evidence of mineralization. This is similar to your proposal.

19.121 **Comment:** EPA strongly recommends that the regulation contain a provision that requires acid rock drainage (ARD) analysis of waste rock and tailings throughout the life of the mine to assure that ARD is not occurring[;] and if it does [;] allowing prompt intervention. What specific types of reclamation does BLM expect to be performed by the typical suction dredge operation? What potential unnecessary or undue degradation (UUD) does BLM reasonably expect from the typical suction dredge operation? This issue must receive more specific analysis and discussion with the affected users before a final rule can be published.

Response: §3809.420 (c) (3) *Acid-forming, toxic, or other deleterious materials.* Requires acid rock drainage (ARD) analysis of waste rock and tailings throughout the life of the mine to ensure that ARD is not occurring and provides for prompt intervention if ARD is occurring. Suction dredge operations typically require little reclamation because their disturbance is minor. Minor disturbance from suction dredging results from the restrictions that apply to their use, such as prohibiting suction dredging of streambanks, damage to woody riparian habitat, and the use of winches to ensure that trees and other streamside vegetation are not damaged. In addition, season of use restrictions protect fish eggs and sac fry by avoiding critical fish spawning periods. BLM sees little potential for unnecessary or undue degradation (UUD) as a result of the operations of suction dredges on public lands. Most suction dredging will be permitted by a state that requires certain restrictions on their use. If not permitted by a state, BLM will review a Notice or Plan of Operations submitted by suction dredge operators, who must explain how their operations will not result in UUD.

19.122 **Comment:** The terms "deleterious" and "undesirable effluent" are vague and overly broad, and need to be either deleted or defined. Similarly the references to "alkaline" or "metal bearing" leachate are ambiguous and should be removed. Also, the language in this section needs to be modified to insert some flexibility. First, the phrase "To the extent practicable for prudent operations" needs to be added to the beginning of [section 3809.420 (c) (3) (i). Second, the final sentence of [section] 3809.420 (c) (3) (iii) should be amended to read: "Source control to reduce acid drainage is preferred over long-term, or post-mining, effluent capture and treatment."

Response: These terms have been used for quite some time in BLM policy and have not resulted in interpretation problems. BLM does not think flexibility in preventing impacts caused by acid-forming, toxic, or other deleterious material is in the best interest of protecting the public lands.

19.123 **Comment:** The proposal to incorporate into law several of BLM's guidance documents is redundant and unnecessary. Mining companies are now being managed by BLM in accordance with the provisions of the guidance documents on acid rock drainage and cyanide.

Response: We think it is highly appropriate to include policies developed since §3809 was issued into the revised §3809 regulations. This is one of the many reasons that the regulations needed updating after 18 years. As you state, mining companies are now being managed by BLM in accord with the provisions of the guidance documents on acid rock drainage and cyanide. For operators to be aware of the requirements for their operations, such policies should be in the regulations.

19.124 **Comment:** We strongly recommend that the regulation section on the reclamation and closure plans specifically address how all Resource Conservation and Recovery Act (RCRA) hazardous wastes and all Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) hazardous substances will be effectively treated and disposed of before final closure.

Response: It is inappropriate for BLM to attempt to address how all RCRA and CERCLA hazardous substances will be treated and disposed of before final closure in this regulation. This issue is effectively addressed in §3809.420 (c) (3), (4) and (8)

19.125 **Comment:** Proposed 3809.420 (c) (4) (vi) would require operators at closure to detoxify leaching solutions and heaps ... to minimize impacts to the environment...." We urge BLM to clarify that operators need not wholly detoxify heaps and leaching solutions where it is not cost-effective or feasible and where other means are available to protect the environment. In doing so, BLM would be following the lead of many states (including Nevada) that allow partial detoxification along with other measures (such as cover) if complete detoxification is not feasible and the alternative methods will fully protect the environment.

Response: In §3809.420(c) (4) we list acceptable practices for detoxification of leaching solutions and heaps and adds "or equally successful alternative methods to detoxify solutions and materials..." This statement gives needed flexibility to operators. Partial detoxification is unacceptable if, upon completion, any materials and discharges don't meet standards.

19.126 **Comment:** Section 3809.420 Leaching Operations and Impoundments: You must detoxify leaching solutions and heap or tailings materials during temporary closure and at final reclamation to prevent impacts to the environment from contact with toxic materials or leachate. (This was changed to "minimize.") Again, it is appropriate to require that effects from leaching solutions and leachate from tailings impoundments be confined to the project site, and prevented from migrating off site. Section 3809.420, Groundwater: You must handle earth materials and water in a manner that minimizes the formation of acidic, toxic, or other harmful infiltration to ground water systems and manage excavations and other disturbances to prevent or control the discharge of pollutants into the ground water. (This was changed to "minimize.") The word "control" gives BLM a significant amount of regulatory latitude here. But the message that is sent when "prevent" was changed to "minimize' is that it is not BLM's goal to prevent the discharge of toxics into ground water. Economic practicality will obviously win out over the protection of ground water quality with the present wording. The word "control" cannot be meant or interpreted to mean allowing degradation (i.e. BLM cannot take the position that pollution is acceptable as long as it is "controlled"). "Prevention" is the operative word, and it must guide all decisions. Section 3809.420, when discussing acid-forming materials: If the formation of acid drainage cannot be completely prevented, you must control or prevent migration of acid drainage from the mine facility; and...(this was changed to "minimize uncontrolled.") At a minimum, leaching solutions should be "prevented" from leaving the mine facility. Modern mine facilities have double-lined leach-containment systems with leak detection. Even in the event of a major accident or spill, it is not unreasonable to ask that a well barrier be installed to contain these spills and to pump the containment back to the facility for treatment.

Response: The performance standards in §3809.420 describe the outcome an operation must achieve for each resource and incorporate a requirement for compliance with other state and federal laws. Operations are required to use equipment, devices, and practices that will meet the performance standards of §3809.420. "Minimize" means to reduce the adverse impact of an operation to the lowest practical level. During review of operations, BLM may determine that it is practical to avoid or eliminate particular impacts. We replaced "prevent" with "minimize" in response to public comments that at times an operator cannot prevent all impacts. BLM will determine if impacts can be prevented. We have added migration control to source control in §3809.420 (c) (3) (ii) and (iii).

19.127 **Comment:** I can see where cyanide should be restricted, but there are nontoxic alternatives for leaching. An example would be thiosulphate. I propose that the regulations encourage nontoxic leaching methods and not restrict them as cyanide is. I am thinking of using a nontoxic leaching solution on my claim if it is economical. I would really be stopped, though, if it was regulated as strictly as cyanide. Nontoxic leaching should be exempted from the same cyanide rules.

Response: The impacts of alternative leaching solutions may be less than cyanide. Project specific performance requirements are developed based upon the potential of the operation to create impacts. Therefore, alternative leaching agents may require less stringent operational controls. Your Plan of Operations needs to describe your proposed processing method. BLM would then work with you to ensure it achieves the performance standards.

19.128 **Comment:** I'd like to see this become law: NO mines, no matter how small should be exempt from regulations. especially for discharge, leach pits, and use of arsenic, cyanide, and other toxic chemicals.

Response: All mining operations are required to achieve the performance standards in §3809.420. Laws are passed by Congress, and regulations such as these are issued to implement those laws.

19.129 **Comment:** Revise .420 (c) (4) (vi) by deleting the second sentence. As written, a Plan that uses one of the listed "how methods that subsequently fails makes the Department of the Interior directly responsible and liable for any unnecessary or undue degradation. As noted elsewhere in the comments, this is a technical matter addressed in the water quality discharge permit by the state or EPA. When BLM as the land owner specifies a "how to" standards (for example natural degradation), BLM assumes direct liability for its success as long as the owner/operator uses the specified method in a reasonable and customary manner.

Response: We have not specified "how methods." Rather we have given operators some acceptable practices that may be used to detoxify leaching solutions and heaps. Upon completion of reclamation, all materials and discharges must meet standards. Liability for operators and mining claimants is addressed at §3809.116 (a) Mining claimants and operators (if other than the mining claimant) are jointly and severally liable for obligations under this subpart that accrued while they held their interests. Jointly and severally liable, in this context, means that the mining claimants and operators are responsible together and individually for obligations such as reclaiming the project area. Should obligations not be met, BLM may take any action authorized under this subpart against either the mining claimants or the operators, or both. BLM is not liable for unanticipated impacts. The operator and/or claimant is responsible for all environmental impacts, unanticipated or not.

19.130 **Comment:** All operations using cyanide, sulfuric acid, or other extractive solutions should require lining and lining detection devices for new piles and expansion of existing piles and detoxification of extraction solutions at closure.

Response: §3809.420 (c) (4) (ii) requires a low permeability liner or containment system

and monitoring to detect potential releases if leakage occurs. §3809.420 (c) (4) (vi) requires detoxification of extraction solutions at closure.

19.131 **Comment:** Revise .420 (c) (3) (4) to describe BLM liabilities when (a) BLM approves a Plan of Operations involving acid rock drainage or leaching processes, (b) BLM requires financial guarantees to fully meet the owner/operator obligations, including third-party contracting and BLM administrative costs in the event of default, (c) the owner/operator fully complies with the approved Plan, and (d) later acid rock drainage or leaching issues arise.

Response: Under §3809.116 mining claimants and operators (if other than the mining claimant) are jointly and severally liable for their obligations under §3809. Jointly and severally liable, in this context, means that the mining claimants and operators are responsible together and individually for obligations, such as reclaiming the project area. Should obligations not be met, BLM may take any action authorized under this subpart against either the mining claimants or the operators, or both. The operator and/or claimant is responsible for all environmental impacts, unanticipated or not.

19.132 **Comment:** Section 3809.420 (c) (4) (vii) [(vi)] All "materials and discharges must meet applicable standards." What standards will apply to "materials," and where will compliance be measured? BLM needs to give specifics. The rule should consider a point of compliance, to be established on site-specific considerations.

Response: Applicable standards are those in §3809.420. Location of compliance with standards is a site-specific determination to be made on a case-by-case basis and cannot be specified in a national regulation.

19.133 **Comment:** Existing regulations were finalized in the early 1980s before the widespread use of the cyanide heap leach process. This process has led to huge open pits never contemplated in the General Mining Law of 1872 or the Federal Land Policy and Management Act upon which these changes are based. Thus, changes are needed both to accommodate the new scale of mining as well as technical quality issues related to cyanide heap leach technology. The reclamation plan should include plans for heap detoxification. This goes beyond "isolation" or "control," which could be met by merely capping a heap. The regulations must specify that the plan include "plans" to remove residual cyanide, etc. from the heap. The reclamation plan should also include plans for pit refill, unless determined to be infeasible (see below). Also included should be plans for treating water running from the site and poor quality water in the pit. It is essential to provide containment spaces for all potential spills. We welcome the addition of section (c) (4). It should not be acceptable to bury leaching solutions as (vi) appears to allow. We recommend eliminating natural degradation as an acceptable

practice if that includes isolation so that natural processes may occur.

Response: We agree that one of the main reasons for updating the §3809 regulations is the evolution of mining practices since the early 1980s. §3809.420 (c) (4) (vi) requires detoxification of heaps. Upon completion of reclamation, all materials and discharges must meet standards. Residual cyanide must be removed from the heap to meet standards. BLM will determine the need for pit backfilling by a site-specific review of information provided and environmental analysis of the Plan of Operations. BLM may determine the amount of backfilling required, considering economic, environmental, and safety concerns. Pit water quality must meet federal, state, or where appropriate, local government standards. Where no standards exist, operators must take measures to protect wildlife, livestock, and public water supplies and users. This protection could require treating pit water quality. §3809.420 (c) (3) (iii) requires any discharge of water from the site either to meet standards or undergo water treatment. §3809.420 (c) (4) (iii) and (iv) require containment for all potential spills. Natural degradation to detoxify leaching solutions and heaps is permissible if upon completion of reclamation the materials meet standards.

19.134 **Comment:** We strongly urge that forms of leach recovery be completely eliminated as our water sources are far too valuable and so limited.

Response: It is our intention that the §3809.420 standards adequately protect the public land water resources from heap leaching.

19.135 **Comment:** 3809.420 (c) (4) (iii) "You must ...construct...facilities... to contain percip. from storm event(s), in addition to the maximum process solution inventory.": I think this is a good idea, but it could cause a significant increase in surface disturbance, reclamation cost, and reclaiming bonds, especially for larger mineral processing facilities. And, does "process solution inventory" include the potential draindown from tailings impoundments with toe seepage collection systems? Maybe an analysis of potential resource impacts from solution discharge should be completed before operators are required to build huge containment structures for releases that would not affect water resources, wildlife habitat, or public safety. These issues should be clarified in the regs.

Response: We recognize that increased surface disturbance could result from increasing the capacity of facilities and impoundments to contain a 100-year, 24-hour storm event. This was a compromise between smaller storm events and the probable maximum storm event. We think this added safeguard is needed to protect the public lands and that the increased size of containment structures is justified. Process solution inventory does include the potential draindown from tailings impoundments with toe seepage collection systems.

19.136 **Comment:** We urge BLM to resurrect the language that would have considered

the creation of the need for perpetual water treatment to be unnecessary or undue degradation and grounds for denial of planned operations. Unnecessary or undue degradation should be defined as something more than a failure to meet the rule's performance standards. If requiring water to be treated for a long as can be foreseen into the future is not undue degradation, then what is?

Response: We first proposed the denying a Plans of Operations resulting in unnecessary or undue degradation for operations that predicted long-term (>20 years) water treatment. But initial feedback from EPA did not support this proposal. Without substantial support for this position, we dropped it from further consideration. We considered this prohibition in Alternative 4. We have addressed the issue of long-term water treatment by addressing in §3809.420 (c) (4) (vi) detoxification of leaching solutions and heaps, management of tailings during closure and final reclamation, and requiring all materials and discharges to meet standards upon completion of final reclamation. In addition we now may require (see §3809.552 (c), if needed, that financial guarantees establish a trust fund or other financial mechanism available to BLM to ensure the continuation of long-term treatment to achieve water quality standards and other long-term postmining maintenance requirements.

19.137 **Comment:** This performance standard appears to require elimination of all highwalls. This may not be feasible in some cases. Highwalls should be modified to minimize safety hazards (i.e. benching, etc.). Elimination is not always needed to minimize safety hazards.

Response: §3809.420 (c) (6) states that highwalls may be temporarily retained in a safe condition to preserve evidence of mineralization.

19.138 **Comment:** 3809.420 (c) (6) The proposed rules are not clear about when regrading or grading starts. Is this a daily, weekly, monthly, or yearly event, or can the operator wait until the reclamation phase of the project starts? The way the section reads, one could believe that with each truck load of rock dump BLM would require immediate unnecessary or undue degradation (UUD) control. Will BLM allow large earth moving equipment tires to be used for UUD and erosion control.

Response: §3809.420 (a) (5) requires operators to begin and complete reclamation at the earliest economically and technically feasible time on portions of the disturbed area that will not be further disturbed. You are correct that BLM does require prevention of unnecessary or undue degradation at all times. Tires are not suitable for erosion control.

19.139 **Comment:** How does BLM intend to address the requirement to "minimize impacts" when "minimizing" one impact could increase another impact? For example, construction stockpiles or waste piles with more gradual slopes may be

appropriate to reduce erosion but may increase the area of surface disturbance. With all of the requirements to "minimize" impacts under the performance standards, how will BLM balance these requirements?

Response: If there is a conflict between standards, it will be resolved on a case-by-case basis.

19.140 **Comment:** 3809.420 (b) (5) contains the performance standards for revegetation. In Section 3809.420 (b) (5) (v) the word "minimize" should be used rather than "prevent" so the sentence would read "... you must use other techniques to minimize erosion..." It may not always be necessary or technically or economically feasible to prevent erosion, and prevention of erosion clearly exceeds the unnecessary or undue degradation standard under FLPMA. Also, as noted above , the definition of "minimize" must be clarified.

Response: In response to public comments like yours, we have made your recommended change.

19.141 **Comment:** BLM has not considered that there are valid reasons for leaving highwalls other than mineralization.

Response: We recognize there are many reasons for leaving highwalls, including maintaining evidence of mineralization. The proposed final regulations provides for a determination based on a number of factors, including safety, technology, environmental and economic concerns.

19.142 **Comment:** Section 3809.420 (c) (6) (ii) : This section would modify the rule by stating that disturbed areas may "temporarily" remain unreclaimed to preserve evidence of mineralization. Federal and state laws require a "discovery" on each claim. The ability to market a property requires exposure. This section should instead specify a reasonable exposure size and a means of maintaining it in a safe, nonpolluting manner, as opposed to burying every outcrop so that the next person has to further disturb the soil to meet the letter of the law.

Response: §3809.420 (c) (6) (ii), we think, provides for adequate discovery evidence. Temporary retention of highwalls and other evidence and information will satisfy discovery requirements.

19.143 **Comment:** The proposed regulations would establish a requirement that mine pits would have to be backfilled for whatever judgmental reasons: environmental, safety, economic, or some combination of the three. Minerals values will be gone forever, and premature closure of open pit mines is inevitable.

Response: The presumption for pit backfilling has been removed. §3809.420 (c) (7) now reads *Pit reclamation.* (i) Based upon the site specific review of §3809.401 (b) (3) (iii), and environmental analysis of the plan of operations, BLM may determine the amount of pit backfilling required, taking into consideration economic, environmental and safety concerns. (ii) You must apply mitigating measures to minimize the impacts created by any pits or other disturbances that are not completely backfilled. (iii) Water quality in pits and other water impoundments must comply with applicable Federal, State and where appropriate local government standards. Where no standards exist, you must take measures to protect wildlife, domestic livestock, and public water supplies and users. BLM will review the information required in §3809.401 (b) (3) (iii) Mine reclamation, including information on the feasibility of pit backfilling that details economic, environmental and safety concerns; to make its determination regarding the amount of backfilling required.

19.144 **Comment:** 3809.420 (c) (7) (iii) requires mitigation measures if a pit is not completely backfilled. This provision should be deleted. This mandatory requirement is inappropriate.

Response: We think it is entirely appropriate to require operators to take mitigation measures if they do not completely backfill a pit or other disturbance. The intent of this mitigation requirement is to ensure that impacts of not backfilling pit areas are mitigated. For example, if leaving a pit highwall creates a safety hazard, required mitigation may include erecting fencing and hazard signs. If the pit is in significant wildlife habitat that cannot be restored unless backfilled, then the mitigation may require providing replacement habitat in another location.

19.145 **Comment:** Performance Standards. BLM's economic factors to consider when weighing the feasibility of pit backfilling must include the mineral resources from future development or rendered inaccessible due to backfilling and the negative environmental impacts of pit backfilling.

Response: From the site-specific review of §3809.401 and environmental analysis of the Plan of Operations, BLM may determine the amount of backfilling required, considering economic, environmental, and safety concerns. Negative environmental impacts and unavailable mineral resources may be some of the items considered.

19.146 **Comment:** If you dig a hole, fill it up. No excuses.

Response: In response to public comments and the NRC (1999) study, we have removed the presumption for pit backfilling. §3809.420 (c) (7) now reads *Pit reclamation.* (i) Based upon the site specific review of §3809.401 (b) (3) (iii), and environmental analysis of the Plan of Operations, BLM may determine the amount of pit backfilling required, taking into consideration economic, environmental and safety concerns. (ii) You must

apply mitigating measures to minimize the impacts created by any pits or other disturbances that are not completely backfilled. (iii) Water quality in pits and other water impoundments must comply with applicable Federal, State and where appropriate local government standards. Where no standards exist, you must take measures to protect wildlife, domestic livestock, and public water supplies and users. BLM will review the information required in §3809.401 (b) (3) (iii) Mine reclamation, including information on the feasibility of pit backfilling that details economic, environmental and safety concerns; to make its determination regarding the amount of backfilling required.

19.147 **Comment:** When should degradation of land from an unreclaimed open-pit mine be regarded as undue degradation, that is, "inappropriate" or "unwarranted" degradation? "Inappropriate" or unwarranted degradation" is site sensitive; the same action might be "inappropriate degradation" in one location but not another.

Response: Degradation of land from an unreclaimed open pit mine is regarded as undue degradation when not mitigated. The mitigation requirements for pits that are not completely backfilled will be determined on a site-specific case-by-case basis.

19.148 **Comment:** BLM must clarify the requirements for open pits that are not backfilled.

Response: §3809.420 (7) (ii) requires operators to take mitigation measures if they do not completely backfill a pit or other disturbance. The intent of this mitigation requirement is to ensure the mitigation of impacts of not backfilling pit areas. For example, if leaving a pit highwall creates a safety hazard, required mitigation may include erecting fencing and hazard signs. If the pit is in significant wildlife habitat that cannot be restored unless backfilled, then the mitigation may require providing replacement habitat in another location. The mitigation requirements for pits that are not completely backfilled will be determined on a site-specific basis.

19.149 **Comment:** Clearly, some pits should be backfilled, and some pits should not be backfilled. This decision should be evaluated on environmental grounds. If backfilling a pit will protect water quantity and quality or public safety, then backfilling is appropriate.

Response: §3809.420 (7) (ii) requires operators to take mitigation measures if they do not completely backfill a pit or other disturbance. The intent of this mitigation requirement is to ensure the mitigation of impacts of not backfilling pit areas. For example, if leaving a pit highwall creates a safety hazard, required mitigation may include erecting fencing and hazard signs. If the pit is in significant wildlife habitat that cannot be restored unless backfilled, then the mitigation may require providing replacement habitat in another location. The mitigation requirements for pits that are not completely backfilled will be determined on a site-specific basis. Environmental concerns will be used when

determining the extent of backfilling or backfilling required.

19.150 **Comment:** BLM's presumption that backfilling is feasible will greatly increase the scrutiny of that issue and place new burdens on BLM to justify deviation from that presumption (not to mention defending Plans of Operations that do not require backfilling through the Interior Board of Land Appeals administrative appeal process.

Response: The presumption for pit backfilling has been removed. §3809.420 (c) (7) now reads *Pit reclamation.* (i) Based upon the site specific review of §3809.401 (b) (3) (iii), and environmental analysis of the Plan of Operations, BLM may determine the amount of pit backfilling required, taking into consideration economic, environmental and safety concerns. (ii) You must apply mitigating measures to minimize the impacts created by any pits or other disturbances that are not completely backfilled. (iii) Water quality in pits and other water impoundments must comply with applicable Federal, State and where appropriate local government standards. Where no standards exist, you must take measures to protect wildlife, domestic livestock, and public water supplies and users. BLM will review the information required in §3809.401 (b) (3) (iii) Mine reclamation, including information on the feasibility of pit backfilling that details economic, environmental and safety concerns; to make its determination regarding the amount of backfilling required.

19.151 **Comment:** BLM should change the phrase "where reasonably practical" to read "where logically practical."

Response: To our knowledge we did not use the phrase "where reasonably practical."

19.152 **Comment:** Part 3809.420 (a) (2) Sequence of operation: Reclamation should be performed concurrent with mining, as noted in section (5). This subject should refer to subpart (5), or state this directly to avoid conflict of meaning.

Response: We think that not referring to §3809.420 (a) (5) *Concurrent reclamation* in §3809.420 (a) (2) *Sequence of operations* does not create a conflict of meaning. We think it is clear that reclamation must be performed concurrent with mining if economically and technically feasible.

19.153 **Comment:** Currently BLM doesn't have a standard for noise pollution. Noise has been found to be deleterious to health. Mine Safety and Health Administration (MSHA) standards are to protect workers only and are not appropriate for protecting adjacent communities. Often times mine neighbors, such as myself, live out of the city limits, and there are no noise ordinances in effect. BLM can regulate hours of operation but doesn't regulate noise per se. Speaking from experience, living next to a mine that doesn't have to meet standards in this area is

a serious regulatory oversight.

Response: Noise pollution from mines on public land is not a universal concern. The proper time to deal with the issue of noise pollution is during the environmental analysis process. Noise can be addressed at that time and impacts properly mitigated.

AFFECTED ENVIRONMENT AND CONSEQUENCES (GENERAL)

20.01 **Comment:** The draft EIS does not address the existing natural conditions before mining operations occurred. It always gives the illusion that the land was previously untouched when, in fact, little has been untouched in the last 120 years.

Response: We recognize that there have been considerable impacts from historic mining, and such mining is one of the reasons for the mining regulation that exists today. The draft and final EIS focuses the analysis starting in1981 with the enactment of the existing 3809 regulations.

20.02 **Comment:** The projection of future impacts appears to assume that the historic pattern of significant withdrawal of public lands from the operation of the federal mining laws will not continue. This is unrealistic when considering the Department of the Interior action in Montana and Utah in just the last year.

Response: Some of these withdrawals were made after the draft EIS was published. While individually large, they do not represent a significant fraction of public land such as would affect the future mineral activity level projections in the draft EIS. In any event, the withdrawal actions are common to all alternatives and therefore do not change the relative impact among the alternatives. The assumptions used in the draft EIS have been modified for final EIS.

20.03 **Comment:** The draft EIS must analyze the wide range of sites and mines regulated under the 3809 program. Mine sites on BLM-administered lands represent an enormous diversity of climate, terrain, geology, mineral deposit types, and mining methods. Both the Affected Environment and Environmental Consequences chapters of the draft EIS must give full and equal weight to the many different types of environmental settings and mines, and provide a separate analysis of the impacts that would occur at these different settings and mines if the various alternatives considered in the draft EIS were implemented.

Response: The EIS provides a programmatic analysis of an incredibly varied land. It would be nearly impossible to address all environmental settings in one document. A detailed description of the environmental setting would be the subject of an environmental analysis for an individual Plan of Operations. The proposed final regulations and alternatives provide options for processes that would be used to consider the site-specific environmental conditions at individual projects reviewed under the regulations.

20.04 **Comment:** The draft EIS lacks any discussion of mitigation measures. The NEPA implementing regulations require that an EIS contain a discussion of the "means to mitigate adverse environmental impacts." We could not find any discussion of mitigation measures in the draft EIS. BLM discusses negative impacts on rural and mining communities in the draft EIS but describes no proposed mitigation. There are any number

of such mitigation measures that could have been considered. BLM could broaden the current transition provisions to "grandfather" more existing operations. It could propose case-by-case variances in situations where alternative approaches may not meet standards but could be shown to protect basic environmental values. These two suggestions are illustrative, not an exhaustive list. Without a list of mitigating measures and some consideration of them, the draft EIS is not complete and does not meet the requirements of NEPA.

Response: The CEQ regulations require mitigating measures only if not already included in the proposed action or alternatives (40 CFR 1502.14(f)). The alternatives presented in the draft EIS include various approaches to regulating mining activities. Some of these alternatives, such as Alternatives 1 and 2 would mitigate (avoid, reduce, or eliminate) impacts of the Proposed Action on the mining industry. Other alternatives, such as Alternatives 3 and 4 would serve to develop a regulatory program that mitigates the impact of mining on other resources. Mitigation measures are built into the alternatives. Of course, specific mitigating measures for an individual project are developed during that project's review and are not addressed in this programmatic document.

20.05 **Comment:** BLM's Table 3-1 on page 78 of the draft EIS implies that the proposed 3809 regulations apply to about 332 million acres of public lands, when the acreage shown contains significant amounts of land closed to entry under the federal mining laws. This table can be reasonably interpreted to read that there are 86.9 million acres of public lands in Alaska that are open to and at risk from improper mining operations. This is incorrect. Of the 86.9 million acres in Alaska, 26% (23+ million acres) are in the National Petroleum Reserve-Alaska (NPRA-A), which has been closed to entry under federal mining law since 1923. Table 3-1 also ignores the substantial acreage in Alaska that is temporarily under BLM jurisdiction and closed to entry under the federal mining laws because of valid selections by the Alaska Native Corporations and the State of Alaska under a variety of acts of Congress and not yet conveyed by BLM, as well as the pipeline corridor and other administrative and congressional closures. Similar misrepresentations are likely in other states because of recent withdrawals in Utah and Montana. Accordingly, this table should have another column that shows the acreage by state open to the operation of the federal mining laws and the acreage open but with restrictions such as a congressional designation or an area of critical environmental concern in a completed land use or activity plan. A map showing those acres and designations also should be appended so that meaningful comments can be made.

Response: The footnote for Table 3-1 shows that the public land acreage figures includes lands withdrawn from entry under the Mining Law. For the final EIS the table has been revised to note that lands segregated from mineral entry are also included in the figures.

20.06 **Comment:** Prime examples of bias are BLM's using mining impacts from the "late 1800s" at "several sites" in the Clark Fork Basin without describing the extent, if any, that

those impacts are directly related to mining on public lands since the effective date of the existing 3809 mining regulations and the extent those impacts from the existing 3809 regulations would be ameliorated by the proposed 3809 regulations (see page 54 of the December 22, 1998 Department of the Interior document).

Response: Impacts from historic mine sites are part of the background or affected environment upon which the effectiveness of the proposed final regulations and alternatives are evaluated. In other cases, impacts from historic mines serve to show the type of effects that can occur without any regulations. We clearly stated in the EIS that these are impacts from historic activity.

20.07 **Comment:** The text of the draft EIS makes several references to a total of 214,000 acres (0.0006%) of public lands having been disturbed by mining since1981. Further, 70% (149,000 acres) remain unreclaimed. The text does not state the extent to which the 149,000 unreclaimed acres are directly associated with the continuing mining operations on public lands, and/or to which reclamation has been completed through recontouring and stabilization but revegetation has not yet met the standard required in the BLM-approved Plan of Operations. The draft EIS is seriously deficient in a factual discussion of why only 30% (65,000 acres) of the disturbed land has been reclaimed. This discussion would be useful in implementing the NRC study (NRC 1999) finding that BLM field operations did not uniformly apply the existing regulations for a variety of reasons. A full disclosure of which field offices have the most trouble implementing the existing regulations will also help the reader understand how and where BLM intends to implement NRC study Recommendations 11,12,15, and 16.

Response: For the most part the unreclaimed acreage is part of ongoing operations. In other instances the projects have been abandoned and are presently unreclaimed. A survey of BLM field offices in 1999 revealed the existence of more than 530 abandoned 3809 operations where BLM has been left with the reclamation liability. Most of these are at the Notice level. None of these unreclaimed acreage would be due to the transition period between having the work accomplished by the operator, yet waiting on BLM approval for final bond release. The purpose of the EIS analysis is not to evaluate ways to implement the NRC's recommendations but to consider changes to the 3809 regulations. We are now considering implementing the NRC's nonregulatory recommendations.

20.08 **Comment:** Page 78, Efficiency. The draft EIS does not rigorously evaluate the administrative changes that "improve efficiency" because almost all of the proposed regulatory changes require more public notice, more evaluation of public comment, more time, more points for appeal, and greater staff costs to BLM.

Response: Alternatives 1 and 2 would either not affect or improve the strictly "administrative" application of the regulations from the operator's perspective. This is shown in an impact analysis presented in Appendix E.

20.09 **Comment:** Table 3-8 (page 90) does not present any reasonable basis to assume that mining is going to increase on public lands in light of the Department of the Interior's recent policies to engage in large administrative land withdrawals in several states so as to prohibit either new mining operations or significantly restrict existing mining claims.

Response: The draft EIS on page 90 states that the overall number of Notices and Plans of Operations submitted under the No Action Alternative is expected to remain about the same or slightly decrease. The final EIS, including Table 3-8, has been revised to account for a further decrease in expected activity levels under the No Action Alternative.

20.10 **Comment:** The issue is impacts to the land that renders mining nonsustainable and hence, of little value.

Response: Mining on an individual project basis is nonsustainable because once the deposit has been mined out, economic operation cannot be continued. Reclaiming areas disturbed by mining addresses the long-term sustainability of the lands involved. The major focus of the performance standards under the alternatives is reclamation to address the sustainability issue.

20.11 **Comment:** Irreversible and Irretrievable Commitment of Resources, page 80. We recommend the EIS explain that when mining reclamation cannot restore the natural ecosystem to its predisturbance condition, this also constitutes an irreversible and irretrievable commitment of resources.

Response: Page 80 of the draft EIS already states that a resource is irreversibly committed when it cannot be restored to its original or predisturbance condition.

20.12 **Comment:** The whole notion of doing something "in perpetuity" as a viable form of reclamation is absurd. If the operation can't be fully reclaimed without requiring some kind of perpetual treatment, then you shouldn't allow it in the first place.

Response: Perpetual treatment or perpetual maintenance requirements are regulatory tools used to address the uncertainty of long-term needs such as water treatment or site maintenance. The actions would not be required "forever" as perpetuity is often thought of, just to some point in the future that is difficult to define. This approach allows the considering of contingencies and provisions for financial assurance mechanisms that might otherwise not occur. Without such an approach, the agencies and operator are forced to make a judgment on the extent and duration of future requirements. These judgments may not be accurate. Alternative 4 considers restricting long-term treatment to a set period and not approving operations that would exceed this requirement.

20.13 **Comment:** The EIS explains that impacts from mining activities are minimal compared to impacts of other actions that will continue to transform rural areas. But it needs to explain

that mining can have far-reaching adverse consequences that go beyond the direct impacts that are more evident. These future indirect impacts on wildlife, vegetation, and other natural resources need more discussion in the EIS.

Response: Although mining does create offsite effects, they are still fairly confined when compared to the larger effects of transforming the rural landscape. Subdivisions, increased recreation use, and the general impacts of an increasing population will continue to overshadow the more localized effects of mining.

20.14 **Comment:** Cumulative Effects, Pages 79-80. The EIS is correct in stating that mineral activity is not the only factor that affects public lands. But it is negligent in restricting the cumulative effects analysis to other future mining activities. Many other actions, including recreation, livestock grazing, agriculture, urbanization, introducing exotic species, and activities on adjacent private lands, can indirectly affect the same resources affected by mining. Furthermore, many uses of postmining reclaimed lands may cumulatively affect wildlife and their habitats. These effects need to be addressed in the draft EIS. Although the EIS describes some impacts of past actions, it does not describe past cumulative effects of such activities as livestock grazing, agriculture, recreation, and urbanization. For example, livestock grazing has disturbed riparian vegetation throughout the West, resulting in both direct and indirect adverse impacts to soils, vegetation, wildlife, water quality, and water quantity in such areas as wells. The cumulative effects of these actions need to be described in the document. The effects of the alternatives on resources, when added to the cumulative effects of other actions, then need to be explained.

Response: Cumulative impacts have been reassessed for the final EIS and the text updated. But the focus of the draft and final EIS are on the effect of the proposed 3809 regulations. These other actions will continue under all alternatives and will overshadow most impacts directly attributable to mining. By focusing on the impacts attributable to changes in the 3809 regulations and alternatives, the analysis can draw a sharper contrast between alternatives and give the decision maker a clear basis for selecting a preferred alternative.

20.15 **Comment:** Recognizing the difficulty of conducting a cumulative regulatory effects analysis does not mean it may or should be avoided. The analysis must include the regulatory programs listed in the Scoping Report (BLM 1997a) as well as the Clean Water Act, the Endangered Species Act, and all other regulatory programs that have been a large cause of the extreme difficulties which the hardrock mining industry faces today in the United States.

Response: The analysis has not been avoided. It is inherent in the baseline conditions. The impacts of these other regulatory programs are already built into the affected environment, including the activity levels projected for Notices and Plans of Operations. The EIS focuses on how this baseline would change as the result of a BLM change in the

3809 regulations under the alternatives.

20.16 **Comment:** BLM's failure to analyze cumulative impacts has also resulted in an incorrect assessment of the impacts of the proposed revisions of the 3809 regulations on future mineral activity. (See draft EIS Appendix E.) Many of these changes will impose more costs, delays, or permitting requirements on the mining industry. BLM's projections of future mineral activity consider only the impact of the proposed 3809 revisions and make no effort to consider the cumulative social, economic, and environmental effects. This oversight has resulted in projections–and environmental analyses–that are wrong.

Response: The projections are correct to focus on the effect of changes in the 3809 regulations since that is what is being proposed. The impacts of other laws and regulations have been built into the description of the affected environment, including the baseline projections for the number of Notices and Plans that would be filed under the No Action Alternative. This number determines future mineral activity levels if the 3809 regulations are not changed. The analysis then considers how changes in the 3809 regulations might affect the baseline projection, either upward or downward, and the associated direct and indirect effect of such changes. The result is a projected number of Notices and Plans and a projected percentage change in mineral activity that considers all other environmental laws and regulations that are common to all EIS alternatives. This projection is then used by each specialist to assess the social, economic, and environmental impacts of each alternative.

20.17 **Comment:** The Forest Service has also taken a number of actions and made several regulatory proposals which should be considered in the NEPA evaluation of the proposed revisions to the 3809 regulations. On February 12, 1999, the Forest Service published an interim final rule suspending road construction in many unroaded areas within the National Forest System. 64 Fed. Reg. 7289 (Feb. 12, 1999). The Forest Service had earlier announced that it would publish a new draft rule for public comment in late 1999. No proposed rule has yet been published, but it is likely that the Forest Service will propose and finalize new rules in roughly the same time frame that the revised 3809 regulations might be finalized. In October 1999, the Forest Service published a scoping notice for a draft environmental impact statement considering the management of "roadless" areas within the national forests. 64 Fed. Reg. 56306 (Oct. 19, 1999). Also in October 1999, the Forest Service published proposed revisions to its forest and land management planning regulations. 64 Fed. Reg. 54073 (Oct. 5, 1999). These Forest Service actions have important implications for future mineral activities, including exploration, on national forest lands. In turn, the availability of forest lands for mineral exploration and development is likely to affect mineral exploration and development on BLM lands. BLM's proposed revisions to the 3809 regulations, when combined with these Forest Service actions, are likely to have a cumulative impact on the environment. The draft EIS should and consider those impacts.

Response: Actions by the Forest Service and Department of Agriculture are not defined enough at this time to be considered more than speculative for mineral operators working under the Mining Law on forest lands. Nor do the Forest Service regulations apply to BLM-managed lands. Therefore, potential cumulative impacts of future Forest Service actions on mineral operators have not been considered in the EIS analysis on BLM's 3809 regulations.

20.18 **Comment:** The EIS for the proposed regulations must consider not only the impact of those regulations on the mining industry and the indirect impacts on employees, dependent communities, and suppliers of the mining industry, but it must also include the cumulative impact of the proposed regulations along with the entire regulatory system applied to the United States mining industry.

Response: The EIS does consider the impact of the 3809 regulations on the mining industry and on the social and economic resources of affected communities. The EIS considers the entire existing regulatory system as applied to the U.S. mining industry as part of the baseline conditions. The EIS accounts for effects on the mining industry in the activity level projections for Notices and Plans under each alternative and in the later environmental effects analysis.

20.19 **Comment:** The NEPA review of the 3809 rulemaking is clearly incomplete in that it fails to incorporate a specific component of the required analysis. CEQ regulations specify that direct, indirect, and cumulative impacts must be considered in an EIS. 40 FCR 1508.25. Cumulative impacts are defined to include "the incremental impact of the action when added to other past, present, and reasonably foreseeable [Federal or non-Federal] future actions." BLM acknowledges this requirement but fails to comply with it (draft EIS, pages 79-80). The Federal Government is now engaged in dozens of rulemaking proceedings aimed directly at mining and mineral processing companies or their immediate customers. These proceedings include EPA's proposed National Hard Rock Mining Framework, BLM's recent use and occupancy regulations, BLM's new bonding regulations, other EPA initiatives such as the recent addition of the hard rock mining sector to the Toxic Release Inventory (TRI) reporting requirements, Clean Water Act proposals on total maximum daily load (TMDL), the Advanced Notice of Proposed Rule Making to change water quality standards, the proposed changes to the underground injection control program, NHPA, ARPA, Migratory Bird Treaty Act, the Interior Columbia Basin Ecosystem Management Project; the U.S. Forest Service's new interim road policy; all Environmental Species Act listings, the U.S. Army Corps of Engineers' proposed changes to Clean Water Act programs for Section 404 permitting, potential changes to the RCRA Bevill exclusion for certain mining wastes, 1996 delegation of CERCLA section 106 remediation order authority to the Departments of the Interior and Agriculture, PACFISH and INFISH, state mining and reclamation statutes and regulations, changes to the Mining Law of 1872 being contemplated by Congress, and the Department's recent (and inappropriate) decision on the use of mill sites in connection with mining claims. BLM

fails to look at the cumulative impact of such regulations when providing the impact analysis for adopting the proposed rule. Together, these rulemakings undermine the ability to mine. But no federal action poses a greater threat to mining in the United States than limiting access to public lands. Additionally, the errors in the analysis are compounded by the failure of the draft EIS to adequately evaluate and discuss the environmental impacts of existing federal and state regulatory programs, which is the baseline from which potential cumulative effects must be analyzed. This analysis should evaluate the cumulative impacts of changes in the 3809 regulations in conjunction with potential changes in royalties, fees, taxes, reporting requirements, and a plausible range of future regulatory developments.

Response: A cumulative impact analysis of other existing mining-related laws and regulations has not been avoided. It is included in the EIS as part of the baseline conditions. The impacts of other laws and regulations have been built into the baseline projections for the number of Notices and Plans that would be filed under the No Action Alternative. This number is used to determine future mineral activity levels if the 3809 regulations are not changed. The analysis then considers how changes in the 3809 regulations might affect the baseline projection, either upward or downward, and the direct and indirect effect of such changes. The result is a projected number of Notices and Plans, and a projected percentage change in mineral activity, that considers all other environmental laws and regulations for each EIS alternative. This projection is then used by each specialist to assess the social, economic and environmental impacts of each alternative. The final EIS has been updated to include the most recent baseline projections and estimated changes in mineral activity and to evaluate the impact of the 3809 regulation alternatives on the environment, the mining industry, and on the social and economic resources of affected communities. Future actions by BLM, the Forest Service, Department of Agriculture, EPA, FWS, or other agencies are not defined enough at this time to be considered more than speculative. Should these actions occur, they would be common to all alternatives and would not greatly affect the relative difference between alternatives. Therefore, the EIS has not considered in detail the potential cumulative impacts of future hypothetical actions.

20.20 **Comment:** The draft EIS failed to disclose that the federal court-ordered "cumulative impact EIS" by BLM concluded that the existing 3809 mining regulations in combination with the coordinated permitting authorities of other agencies such as the Corps, EPA, and state agencies had adequate ways to prevent long-lasting significant cumulative environmental impacts.

Response: The cumulative impact EIS referenced in the comment is believed to be that required to address the cumulative impacts of placer mining under Notice-level operations along several rivers in Alaska. The results of the analysis recognized that the cumulative impacts of these operations could not be addressed without interagency coordination and the use of recreation permits.

20.21 **Comment:** The NRC Committee noted that "...the committee emphasizes that...potential impacts will not necessarily occur, and when they do, they will not occur with the same intensity in all cases." (p. 3) The draft EIS offered no discussion of this concept or evidence to the contrary. Nor did it provide an analysis of proposed and identified environmental impacts and those actually experienced by a project. BLM has analyzed enough mining projects to readily show the imagined and real impacts and their significance. This analysis should reveal what environmental impacts are real and significant.

Response: BLM agrees with the NRC assessment. An environmental analysis is a prediction of future impacts and not a guarantee that the impacts will occur. All future impacts described in the 3809 EIS are potential by definition. At mining operations BLM has also observed a variety of impacts that were not predicted (or were underestimated) in their site-specific environmental analyses. Two general examples include the problems with migratory bird deaths from open cyanide solutions in the 1980s, and the underestimating of the acid rock drainage potential in the early1990s. In both cases BLM responded with policy directives to address these issues and is including elements of these policies in the proposed 3809 regulations. These cases and others experienced by BLM team members were considered during scoping for the rulemaking to determine real and significant environmental issues.

20.22 **Comment:** The draft EIS lacks any evaluations needed to implement NRC study Recommendations 12, 15, and 16.

Response: The purpose of the draft EIS is to consider 3809 regulation alternatives, not how to implement NRC's recommendations. NRC Recommendations 12, 15, and 16 are all implementation recommendations that could be applied under any of the EIS alternatives. Recommendation 12, on staff adequacy and location, would be implemented under any alternative. Recommendation 15, on preparing guidance manuals, would also be adopted to help implement whatever regulatory provisions are finally selected. Recommendation 16, on a more timely permitting process, complements the other two recommendations on making the program more effective.

20.23 **Comment:** We are equally concerned that the BLM's apparent intentions to ignore many of the findings of the NAS/NRC study will impair the agency's ability to manage public lands in a manner that best protects the environment. BLM should regard this study as a valuable tool with which to guide changes and improvements in BLM regulations and policies for mining. As discussed above, the NAS/NRC study contains several insightful observations and important recommendations. Failure to act upon these observations and recommendations will foreclose upon an opportunity to improve BLM's programs and to enhance environmental protections at mines on BLM-managed lands. This missed opportunity is at odds with the environmental interests of WMC members and others affected by mining on BLM-managed lands.

Response: BLM values the results of the NRC study and has changed the proposed regulations so as not to be inconsistent with NRC recommendations as required by Congress. BLM intends to use both NRC's regulatory and nonregulatory recommendations to improve the 3809 program.

20.24 **Comment:** BLM's professional technical staff and BLM state management acknowledge some areas as having extensive and sensitive archeological, cultural, and spiritual resource values or unusual plant assemblages. In phone conversations and at nonpublic meetings, BLM staff and managers acknowledge that these areas should be protected. But some extremely sensitive areas have not been publicly identified in hopes that protection might be better afforded by not drawing attention to the location of such sensitive resources. How best to protect such sensitive and vulnerable resources and sites apparently remains a thorny management decision for BLM, made all the more difficult when the agency receives a proposal for exploratory drilling or mining on sensitive public lands.

Response: NRC also recognized protection of resources not covered by other environmental laws as an issue. BLM has revised the definition of unnecessary or undue degradation to protect significant resources from substantial irreparable and unmitigatable harm.

20.25 **Comment:** OHV Management Strategy. In January BLM announced that it was developing a national strategy for ensuring "environmentally responsible" off-highway vehicle (OHV) use on BLM-managed public lands. The OHV strategy is directly related to the proposed revisions to the 3809 regulations because it addresses some of the same stated objectives for revisions to the regulations, particularly the changes related to casual use and Notice-level operations. The link between these two issues was made even clearer in the notice reopening the public comment period, where BLM issued a clarification on its description of casual use. Thus, the substance of the final 3809 regulations will be significantly affected by BLM's OHV management strategy, and environmental impacts from casual use or notice level operations could substantially differ from those projected by BLM in the draft EIS, which assumes no changes in the current OHV management strategy.

Response: No significant impact to the substance of the 3809 regulations would result from a BLM decision to develop a national strategy for off-highway or off-road use. Specific changes in off-road management are still speculative and undefined. Such uses for operations under the Mining Law would continue to be addressed by Notices or Plans of Operations.

20.26 **Comment:** Implementing BLM-Sponsored/ BLM-Supported Programs. Incredibly, while BLM has failed to properly acknowledge cumulative effects of programs mainly implemented by other federal and state regulatory agencies, it has also ignored broad-

based actions initiated by the agency itself and the Department of the Interior. For example, Secretary Babbitt has discussed, with much fanfare, BLM's National Landscape Monuments, which have been touted as a "new and visionary" system that creatively protects American's natural legacy. The agency's own characterizations of this unique new land conservation system emphasize the shortcomings of the 3809 NEPA analysis: neither the proposed rules not the draft EIS reference the system or evaluate the impacts of the proposed rules given the context of the new protection program.

Response: Since the program was not announced until after the draft EIS was published, we could not include a discussion of it in the draft EIS. The proposed final regulations do add national monuments as one type of special category land where a Plan of Operations is required for any disturbance greater than casual use. The impact of this provision has been accounted for in the assumptions in Appendix E. Specifically we assume public lands open to mineral entry under the mining laws will continue to decrease in the long term as sensitive lands are set aside for environmental protection. The rate of this decline will vary in the short term, depending on the political and social climate. The final EIS has been revised to reflect the potential for more special status lands under this program.

20.27 **Comment:** BLM has acknowledged that the two actions–the proposed revisions to the 3809 regulations and the Solicitor's millsite opinion–are related. BLM's website for the 3809 regulations includes a prominent link to the text of the Solicitor's opinion. Yet the analysis in the draft EIS fails to consider how implementing the Solicitor's opinion together with the proposed revisions to the 3809 regulations will affect the environment. NEPA requires that such impacts be considered and discussed in the draft EIS.

Response: The Solicitor's opinion on millsites applies under all alternatives and is reflected in the current activity level discussed in the Affected Environment section of the final EIS. The 3809 regulations are for managing operations under the Mining Law. BLM is proposing changes in these regulations. If the operator has a right to conduct operations under the Mining Law, then the 3809 regulations are applied to prevent unnecessary or undue degradation. BLM has not added anything in the proposed final regulations on millsite determinations.

20.28 **Comment:** We also believe that BLM's failure to consider the cumulative economic and environmental impacts of the proposed rule requires BLM to conduct a supplemental draft EIS. We particularly wish to stress that, in addition to BLM's failure to consider cumulative impacts in the initial draft EIS alone makes the draft EIS invalid, intervening events between the draft EIS and today have further altered the landscape in relation to the cumulative impact analysis so as to independently require supplementation.

Response: BLM does not believe that a supplement EIS is required. The cumulative impact analysis properly considered all relevant economic and environmental factors and has been revised in response to public comment. Intervening events, such as the NRC

study, have been incorporated into the analysis and, if anything, have provided more support for the regulations proposed by BLM. Changes in the Proposed Action, which can trigger the need to prepare a supplement, are within the range of alternatives analyzed in the draft EIS and are therefore not substantial. The criteria for preparing a supplemental EIS at 40 CFR 1502.9(c) have not been exceeded.

20.29 **Comment:** BLM must coordinate with the U.S. Forest Service, U.S. Fish and Wildlife Service, National Marine Fisheries Service, Small Business Administration, and other agencies to first assess the cumulative impacts of current initiatives on rural America. This assessment, which should be completed and incorporated before any changes in 3809 regulations, should include such measures as the Interior Columbia Basin Ecosystem Management Project, the roadless moratorium, and mineral withdrawals such as the 429,000 acres on the Rocky Mountain Front in Montana. These actions are devastating rural America and are doing little or nothing to protect the environment. Again, such an assessment of the cumulative impacts on the environment and socioeconomic fabric of the affected region is necessary.

Response: Other actions such as those described are part of the baseline conditions common to all of the alternatives presented in the draft and final EISs.

20.30 **Comment:** Early identification of such areas as described in Recommendation 13 assists in the planning and permitting process. Both the Forest Service and BLM have dedicated planning processes in place to do just what this recommendations suggest. Such district or forest planning efforts are not germane to this rulemaking. Nonetheless, NWMA has long urged that agencies, especially the Forest Service, better integrate locatable mineral activities into forest or resource area plans. But we believe that both agencies have done a satisfactory job over the years of recognizing parts of federal lands that truly require special consideration in land use decisions because of natural and cultural resources or special environmental sensitivities. Any appearance to the contrary is largely due to the recent exercise of bureaucratic fiat to alter long-standing definitions and legal interpretations upon which the legally issued planning documents are based.

Response: BLM agrees that NRC Recommendation 13 applies more to how BLM should conduct its planning process than the 3809 regulations. In the 3809 performance standards BLM has provided reference that requires operators to comply with the land use plans where not inconsistent with the Mining Law. This compliance will make the public and operators more aware of lands that require special consideration in Notices and Plans because of natural and cultural resources or special environmental sensitivities.

20.31 **Comment:** NRC study Recommendation 13 is that BLM and the Forest Service need to regularly update and inform "high officials," Congress, the public, and stakeholders, of parts of federal land that requires special consideration because of natural and cultural resources or special environmental sensitivities. The B/C study, draft EIS, and proposed

regulations do not consider how to improve BLM and Forest Service planning or the consequences of incomplete information on existing and potential mineral resources or of simply downplaying mineral resources. Minerals should be treated in the same manner as other resources, and areas of critical environmental concern (ACECs) should be disapproved until mineral resources are fairly and objectively evaluated.

Response: We believe that NRC Recommendation 13 applies more to how BLM should conduct its planning process than how the 3809 regulations should be written. In addition, changes in BLM's planning regulations are outside the scope of this rulemaking. BLM does agree that mineral resources need to be properly assessed in the analysis conducted to determine whether an area should be designated an ACEC. But the ACEC determination is based on the presence of unique or critical resources that require special management to protect them, and not upon the inherent mineral potential of an area. If anything, the higher an area's mineral potential, the more likely the designation is warranted to protect the ACEC's values, since there is a greater potential for surface disturbance. Note that an ACEC designation does not mean the area is withdrawn from operations under the Mining Law. The only effect an ACEC designation has in the 3809 regulations is to require the filing of a Plan of Operations for activity that could otherwise be conducted under a Notice.

20.32 **Comment:** The B-C study, draft EIS, or proposed regulations did not consider either the substance or costs to effectively implement NRC study Recommendation 13. BLM and Forest Service planning does not give existing and potential mineral values on federal land the same degree of attention as they do roadless recreation, wildlife, or cultural values because areas with known or professionally expected mineral values are not identified in land use plans and administrative withdrawals, such as the current 50 million acre plus "roadless" designation, which effectively forestalls existing and future mineral development without unbiased or professional consideration of mineral resources.

Response: NRC recommendation 13 relates to land use planning and not to how the 3809 regulations should be written. Changes in BLM's planning regulations are outside the scope of this rulemaking. The BLM planning process does consider mineral resource development on a comprehensive basis along with other resources. Questions or concerns on Forest Service planning and designations should be addressed to that agency.